

Title V Permit Review Guidelines
EPA Region 9
September 9, 1999

INTRODUCTION

As the implementation of the Title V Operating Permits Program progresses, Region IX is receiving more and more permits for our review. We recognize that each permit we receive is the product of a great deal of effort by the permitting authority and source, and this effort is reflected in the quality of the permits we receive. In our role as permit reviewer, we are required to make certain that the permit fully meets the requirements of Part 70 and assures compliance with all applicable requirements. As the number of permits being reviewed increases, we feel it is increasingly important to ensure the reviews of permits provided by EPA Region IX permit engineers are consistent both in content and process. Thus, we have developed these “Title V Permit Review Guidelines” to provide a roadmap for both new and experienced Region IX permit reviewers to follow. In addition, we are sharing this document with permit writers from state and local agencies so they can benefit from knowing EPA’s review process up-front and understand how to avoid common problems. However, this document is not binding upon state or local agencies.

The content of this document includes both the step-by-step procedures to be followed by Region IX staff in reviewing a permit, as well as substantive permit review tips and background information on identifying and correcting problems (see “How To Use These Guidelines” below). While the document contains for the first time the process that EPA Region IX uses to review Title V permits, it *creates no new policy* on the substantive review of permits. This document sets forth the guidelines which the Region’s permit reviewers use. These guidelines are based on the Title V regulations and policy memoranda issued by EPA Headquarters. Consultation between permit reviewers and other staff and management is standardized to ensure that these guidelines are applied consistently.

Note that the procedures and guidelines identified and described in this document are intended solely for the guidance of Region IX personnel and do not represent final agency action. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States or the Environmental Protection Agency. Region IX reserves the right to act at variance with these measures and to change them at any time without public notice. Finally, nothing in these guidelines is intended to limit Region IX’s authority and ability to object to Title V permits that Region IX determines to be inadequate or otherwise not in compliance with part 70.

As Title V regulations or implementation policies evolve, we plan to prepare updates of either certain sections of these guidelines or the entire document. We will make every effort to distribute such updates as appropriate. For those outside of Region IX, contact the Region IX

Permits Office with questions regarding the availability of updates. We hope today's guidance and any updates will fulfill its intended purpose of promoting consistency in permit review by Region IX.

HOW TO USE THESE GUIDELINES

This document is organized as a set of 4 nested pieces, each described below. New permit reviewers should use all four sections when reviewing a permit. More experienced permit reviewers should be able to rely upon the "Checklist of Topics" to guide the permit review, referring back to the more detailed "Guidelines" section and appendices only for new or complicated issues.

Level I: Step-by-Step Process

- ▶ Describes what the permit engineer should do during each of the 6 weeks of the 45-day review period
- ▶ Sends the reviewer to the **Checklist** and **Guidelines** to undertake the substantive review of the permit
- ▶ Includes
 - *How do I write a comment letter?*
 - *When to object to a permit*
 - *Process for objecting to a permit*
 - *How are issues resolved after an objection?*

Level II: Checklist

- ▶ Provides a list of what permits should contain and what they may contain, along with short descriptors of each item
- ▶ Allows the permit reviewer to determine which **Guidelines** to use

Level III: Guidelines

- ▶ Includes the following subjects:
 - Applicable requirements
 - SIP
 - NSPS, NESHAP, and MACT
 - NSR/PSD
 - Acid Rain Requirements
 - Other applicable requirements
 - Standard Permit Conditions
 - Practical Enforceability
 - Permit Shield
 - Streamlining
 - Periodic Monitoring
 - Schedules of Compliance
 - Alternative Operating Scenarios and Emissions Trading Provisions
 - Cross Referencing and Level of Detail
 - Origin and Authority Citation
 - Insignificant Activities

- ▶ For each subject, contains guidance such as:
 - *What is it?* and *Why review it?*
 - *What to look for* with examples
 - *Description of problems* and *How to correct problems*

Level IV: Appendices

- ▶ Contains EPA policy memoranda and other material referred to in the **Guidelines**

**EPA Region 9
Title V Permit Review Guidelines**

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Level II

Checklist

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Level II - CHECKLIST

This section contains a checklist of topics to guide both new and experienced permit reviewers. For more information on any of the topics listed in this section, refer to the corresponding “Guidelines” on the topic in Level III. The list includes specific “Applicable Requirements” as well as requirements and optional elements from Part 70 or EPA-approved Part 70 programs. Note that the “How Do I Identify it?” column includes whether the permit feature described must be in every permit, or if the permit feature is optional and must be checked only if it is present in the permit being reviewed.

Level II - Checklist

Topic	What is it?	How Do I Identify It?
Applicable Requirements		<i>Check every permit to make sure it includes and assures compliance with all applicable requirements.</i>
<ul style="list-style-type: none"> SIP 	<p>SIP Rules are rules contained in the State Implementation Plan that were submitted by a permitting authority and approved by EPA as required under the Clean Air Act.</p>	<p>SIP rules may apply to specific sources, source categories, or more generally on a pollutant-by-pollutant basis. The facility and permitting authority should make determinations on which, if any, SIP rules apply, and include these rules with the proper citation in the permit.</p>
<ul style="list-style-type: none"> NSPS 	<p>NSPS stands for New Source Performance Standards. These standards are found in 40 CFR Part 60.</p>	<p>Affected facility and permitting authority should make initial determinations on whether NSPS requirements apply. Determinations are based on type of emissions unit, size of unit (e.g., heat input), and date of construction or modification (reconstruction). If subject, make sure details are adequately included.</p>
<ul style="list-style-type: none"> NESHAP 	<p>The standards for sources emitting hazardous air pollutants are called the National Emission Standards for Hazardous Air Pollution (NESHAP). Those standards promulgated before the 1990 CAA amendments are found at 40 CFR Part 61.</p> <p>The 1990 CAA amendments identified 188 hazardous air pollutants and created a requirement to control the emissions of these HAPs through the “Maximum Achievable Control Technology” standards. The post-1990 NESHAPs (also known as MACT standards) are specific to various source categories and are listed in 40 CFR Part 63.</p>	<p>Like the NSPS requirements above, sources are required to determine whether the specific standards apply. Check the permit application (and other supporting documents) to see if the source has made any such determination. Also, check the list (table of contents) in 40 CFR Part 61 and Part 63 to see if the source whose permit you are reviewing contains any subject emission units. If subject, make sure details are adequately included (see level III).</p>

Topic	What is it?	How Do I Identify It?
Applicable Requirements (continued) <ul style="list-style-type: none"> NSR/PSD 	<p>Federally enforceable conditions in the Title V permit that originate from past (or concurrent, if a merged Title V/NSR program) SIP-approved permits.</p>	<p>Look for references to past permit conditions or NSR rules (in the citations of origin and authority). Check that the permitting authority is including past ATCs or current permits to operate as part of their complete proposed permit package submittal.</p>
<ul style="list-style-type: none"> Acid Rain 	<p>The Acid Rain Program under Title IV of the Clean Air Act regulates certain new and existing utilities and other facilities which combust fossil fuel and generate electricity. Affected sources are required to get an Acid Rain Permit that can include SO₂ and NO_x emission limitations and/or monitoring, recordkeeping, and reporting requirements.</p>	<p>Title V permits for all sources subject to Acid Rain must include the Acid Rain Permit as part of the Title V permit. The Acid Rain Permit must contain the following sections:</p> <ul style="list-style-type: none"> Statement of Basis, SO₂ allowances and NO_x requirements for affected units, Comments, notes, and justifications, Permit application (may be incorporated by reference).
<ul style="list-style-type: none"> Other Applicable Requirements 	<p>The Part 70 definition of “applicable requirements” includes several other standards which must be addressed when reviewing a Title V permit. These requirements originate from specific federal requirements (e.g., stratospheric ozone depleting substances). If any of these requirements are applicable to a source, they must be included in the Title V permit. Specific boilerplate language is in Section III.</p>	<p>Boilerplate language is often included in the “General Conditions” section of the permit. Standards which require permit conditions for only a few source categories are often listed in the “Special Conditions” section of the permit.</p>

Level II - Checklist

Topic	What is it?	How Do I Identify It?
Standard Permit Conditions	Standard permit conditions are required under part 70 and the approved Part 70 program to be placed in every Title V permit.	<p>These conditions are generally grouped together in the permit under the heading “standard conditions” or “general requirements.”</p> <p><i>Check the first few permits from every agency to make sure that all of the standard conditions are correctly included; thereafter, make sure that the same language is carried over into each permit.</i></p>
Practically Enforceable Language	Practically enforceable permit language establishes a clear legal obligation for the source and allows compliance to be verified.	<p>Practically enforceable language does not:</p> <ul style="list-style-type: none"> • create ambiguous interpretations of requirements • circumvent required public and EPA review • prevent or limit enforcement of permit conditions • excuse violations, or • limit the types of information that can be used to determine compliance. <p><i>Check every permit carefully to make sure the language is practically enforceable.</i></p>

Level II - Checklist

Topic	What is it?	How Do I Identify It?
Permit Shield	A permit shield is specific permit language that can protect a source from enforcement of an applicable requirement.	<p>Permit shields are usually labeled, but can otherwise be identified by language such as:</p> <ul style="list-style-type: none"> • “Requirement [A] has been determined not to apply to this facility”, OR • “Compliance with the permit shall be considered compliance with Applicable Requirement [B].” Permit shields may be found under general provisions, but are more likely to be contained under permit- or unit-specific parts of the permit. <p><i>Permit shields are optional but should be reviewed carefully if present.</i></p>
Streamlining	Streamlining is the process of evaluating multiple overlapping requirements on an emission unit to come up with one set of requirements to be placed in the title V permit that will assure compliance with all the overlapping requirements.	<p>Look in the statement of basis accompanying the permit for an explanation of any streamlining done in the permit. In addition to this streamlining demonstration, a streamlined permit term should include multiple citations to all subsumed requirements.</p> <p><i>Streamlining is optional but should be reviewed carefully if present.</i></p>

Topic	What is it?	How Do I Identify It?
Periodic Monitoring	Periodic Monitoring describes the combination of monitoring required by the applicable requirements and monitoring created in the Title V permit as necessary to meet the CAA requirement that the permit assure compliance with the applicable requirements.	<p>Periodic monitoring must be addressed for each applicable requirement in a Title V permit. Monitoring includes activities such as:</p> <ul style="list-style-type: none"> • Continuous Emission Monitoring Systems (CEMS) • Continuous Opacity Monitoring Systems (COMS) • Parametric Emissions Monitoring (PEMS) • Parametric Monitoring (continuous or at specified intervals) • Periodic Source Testing • Recordkeeping <p><i>Check that all emission and operational limitations or requirements in the permit contain adequate periodic monitoring.</i></p>
Schedules of Compliance	A schedule of compliance details an enforceable sequence of actions that will return a non-complying source to compliance.	<p>A schedule of compliance will usually appear as a sequence of actions with milestones leading to compliance with specific applicable requirements.</p> <p><i>Schedules of compliance are required in the permit only if the source is out of compliance with an applicable requirement. Use information in the application and other available information to determine if schedule must be included; Also, review if present.</i></p>

Topic	What is it?	How Do I Identify It?
Alternative Operating Scenarios and Emissions Trading Provisions	<p>The Title V permitting program allows the Title V permits to contain terms and conditions for “reasonably anticipated” operating scenarios. A source with an approved alternative operating scenario(s) may, as part of normal operations, make changes in operations in a way that triggers a different set of applicable requirements.</p> <p>A Title V permit may include provisions that allow permitted sources to establish a federally enforceable emissions cap that allows emission increases and decreases at the facility to be traded.</p>	<p>Alternative Operating Scenarios should be identified in the permit as such. Look for subsections and headings in the permit that identify the Alternative Scenario.</p> <p>Emission trading provisions may be difficult to identify. Look for specific language in the permit that discusses the source’s ability to trade emission increases with past decreases. For SIP approved trading programs (RECLAIM) review the permit for provisions that allow such trades.</p> <p><i>Alternative operating scenarios and emissions trading provisions are optional but should be reviewed if present.</i></p>

Topic	What is it?	How Do I Identify It?
Cross Referencing and Level of Detail	<p>Cross-referencing refers to the practice of referencing an applicable requirement in a permit instead of including the full requirement.</p> <p>The permit must describe the applicable requirement with sufficient level of detail to ensure each requirement is clear and unambiguous.</p>	<p>Be on the lookout for permit conditions that refer to specific regulations or documents such as:</p> <ul style="list-style-type: none"> ▸ SIP Rules ▸ NSPS or NESHAP ▸ operation and maintenance plans ▸ test methods ▸ permits numbers ▸ monitoring protocols <p>The level of detail required depends on what the applicable requirement is and how the applicable requirement is included in the permit. In general, permits with more cross-referencing will have less detail in the permit.</p> <p><i>Check every permit for an adequate level of detail. Cross referencing is optional and should be reviewed if present.</i></p>
Origin and Authority Citation	<p>The citation identifies the applicable requirement that is the origin of and authority for the inclusion of a permit condition.</p>	<p>A citation of origin and authority consists of a rule number and section or an SIP-approved permit number.</p> <p><i>Check that each permit condition includes the appropriate citation.</i></p>
Insignificant Activities	<p>Part 70 programs may contain lists of activities designated as “insignificant” based on level of emissions and whether the activities are typically subject to unit-specific requirements.</p>	<p>Insignificant activities are defined within each permitting authority’s part 70 program.</p> <p><i>Review if a permit or permit application excludes units or activities from applicable requirements or part 70 requirements based on their status as insignificant activities.</i></p>

Level II - Checklist

Level III

Guidelines

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Guidelines

Applicable Requirements

Introduction

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What are Applicable Requirements?

Applicable requirements are all of the Clean Air Act requirements for a title V source. A title V permit must assure compliance with all applicable requirements. Common sources of applicable requirements are:

- The state implementation plan (SIP)
- SIP-approved permits previously issued to the source
- Standards promulgated by EPA, e.g.,
 - S** New Source Performance Standards (NSPS, including NSPS general provisions)
 - S** National Emissions Standards for Hazardous Air Pollutants (NESHAPs, including MACT standards, and general provisions for these)
 - S** Title IV (Acid Rain) requirements, and Title VI (Stratospheric Ozone) requirements

The next five sections of these guidelines provide more information on reviewing specific applicable requirements in permits.

CAA 504(a) requires each title V permit to “assure compliance with applicable requirements of this chapter [Clean Air Act], including the requirements of the applicable implementation plan [SIP].” 40 CFR 70.2 gives a complete definition of applicable requirements that must be included in a title V permit.

Why Review the Applicable Requirements?

A major **benefit** of a title V permit is that it combines into a **single document** all of a source’s Clean Air Act requirements in order to eliminate confusion for the source, the public, the local permitting authority, and EPA as to what requirements apply. This benefit is achieved if:

- **the permit does not incorrectly exclude any Clean Air Act requirements of a source.** While it may seem straightforward to determine which requirements apply to a source, the ongoing revisions to SIPs and implementation of new and revised federal standards such as NSPS and MACT require careful evaluation.
- **the permit correctly and completely captures all applicable requirements.** When a requirement is transferred into the title V permit, even small changes to the words can have an effect on the meaning or stringency of a requirement. In addition to including emission limits, the permit should also include any monitoring, record keeping, reporting, and work practice standards associated with a requirement.

What Other Terms Relate to “Applicable Requirements”?

“*State-Only Requirements*”: You will find certain title V permit conditions marked as “State-Only” or some other designation indicating the condition is not federally enforceable. Provisions for these types of conditions are specified under §70.6(b)(2):

“...the permitting authority shall specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.”

The universe of applicable requirements includes all federally-enforceable requirements, so a permit term can be “State-only” only if it is not defined as an applicable requirement under 70.2. “State-only” requirements are usually requirements from local rules that have not been incorporated into the SIP. If you come across permit conditions designated as “State-Only,”

- Confirm that the condition is not federally enforceable. The NSR Permit Terms and Conditions section of these guidelines gives more information on what previously existing permit conditions are considered federally enforceable.

If the condition is eligible for State-Only status, *it does not need to meet the part 70 requirements (e.g., periodic monitoring requirements) with a few exceptions*. These exceptions are

- If the condition is being used to meet a federal requirement (see the Streamlining section in these guidelines) or to exempt a source from a federal requirement (see the section of these guidelines on Alternative Operating Scenarios and Emissions Trading Provisions)
- If the condition will automatically become federally enforceable during the permit term (see discussion of sunset/sunrise clauses in the section on SIP guidelines.)

“*Future Effective Requirements*”: The definition of “applicable requirement” includes the language “including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future effective compliance dates.” Since all applicable requirements must be included in the title V permit, make sure that all future effective requirements are included.

“*Generally-Applicable Requirements*”: This term is not used in part 70, but is used in the White Papers 1 and 2. Page 9 of White Paper 1 describes these as broadly applicable requirements usually from SIPs, and says “Examples...include requirements that apply identically to all emissions units at a facility (e.g., source-wide opacity limits), general housekeeping requirements, and requirements that apply identical emissions limits to small units (e.g., process weight requirements).” For more information on how these requirements may be treated in the title V permit, see “Level of Detail” and also Page 9 of White Paper 1 in Appendix A. The term “*unit-specific requirements*” is not from part 70 but is used as the opposite of “Generally Applicable Requirements.” The term refers to requirements that either apply only to specific units, or where unit-specific information is needed to determine applicability.

Guidelines

Applicable Requirements:


State Implementation Plan (SIP)

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How Do I Check for SIP Rules in a Permit?

 **What Are They?** SIP Rules are rules contained in the State Implementation Plan that were submitted by a permitting authority and approved by EPA as required under the Clean Air Act. These rules may apply to specific sources, source categories, or on a pollutant-specific basis. The approval of rules into the SIP by

Pursuant to the definition of “applicable requirement” in Part 70, a permit must contain “...any standard or other requirement provided for in the applicable implementation plan [SIP] approved or promulgated by EPA...” When reviewing a permit to check for SIP rules, follow these steps:

1. Scan the table of contents of the approved SIP and identify all rules which are potentially related to the source.
2. Turn to the text of each rule identified as potentially related to determine if it is applicable to the source based on source size, fuel type, source construction or modification dates, or other criteria given in the rule. (Refer to the statement of basis for the permit to obtain the specifications of this source, or ask the permitting authority for more information as necessary.)
3. Verify that the rule was correctly incorporated into the permit (see tips below).

What is the “SIP gap” ? As permitting authorities submit rules for inclusion in the SIP, EPA must review and approve or disapprove each submitted rule based on whether it meets certain Clean Air Act requirements. Rules that have been adopted locally and submitted to EPA but not yet approved into the SIP (or disapproved) by EPA are said to make up the “SIP gap.” The term “SIP gap” is used because there is a difference (gap) between the rules that have been approved into the SIP and the rules that are being implemented locally (i.e. “local rules”).

How does the “SIP gap” affect permit review? Local rules (including those in the “SIP gap”) are not applicable requirements under Part 70 and are not required to be in title V permits, although many permitting authorities choose to include local rules in title V permits. Local rules become federally enforceable upon approval into the SIP by EPA. A title V permit must assure compliance with all rules approved into the SIP by either including the SIP rule, or by including a local rule in the permit with a streamlining demonstration that the local rule assures compliance with the SIP rule (see tips below). A local rule may be included without a streamlining demonstration if EPA has made a written determination that the local rule is more stringent than the SIP rule. Copies of these stringency letters are located in the title V program binders.

Tips for Review of SIP Requirements

Issue	Explanation	What to Look For
Incorporation by reference/Level of detail included in the permit from the SIP rule	It may be helpful to incorporate lengthy portions of SIP rules by reference. See the guidelines on incorporation by reference.	Check that the permit contains the source's emission limits, and that a source's compliance obligations are clear.
Streamlining SIP rules with local rules	Permits can be issued based on local rules provided that the permit still assures compliance with the SIP approved rules through a proper streamlining demonstration (see page 20 of White Paper #2 and the streamlining section of this guidance for more information). A local rule may be included without a streamlining demonstration if EPA has made a written determination that the local rule is more stringent than the SIP rule. Copies of these stringency letters are located in the title V program binders.	<p>If the permit contains streamlining of SIP rules with local rules, check to make sure:</p> <ul style="list-style-type: none"> - a demonstration is given that describes any differences, including monitoring requirements, between the SIP rule and the local rule, and - a local rule that subsumes a SIP requirement is marked federally enforceable, as described on page 11 of White Paper #2.
<p>Sunset/sunrise clauses for SIP rules that are about to be replaced through EPA approval of a local rule into the SIP</p> <p>(Note that a permit must be reopened to incorporate new applicable requirements if there are more than three years remaining in the title V permit term, pursuant to Part 70.7(f))</p>	A permit may contain a "sunrise" clause that makes a condition originating in a local-only rule federally enforceable upon EPA approval of the rule into the SIP. Similarly, the "sunrise" clause may be accompanied by a "sunset" clause that makes the permit term based on the superseded SIP rule void once the SIP revision is approved (see page 11 of White Paper #1).	<p>For local-only conditions that will become federally enforceable : The permit must assure compliance with the new SIP rules. Thus, review the conditions in detail as if they were currently federally enforceable. Assuring compliance includes periodic monitoring, recordkeeping and reporting, etc.</p> <p>For conditions from SIP rules that will be superseded: Check that the permit language does not allow the condition from the SIP rule to become non-federally enforceable until the SIP revision is approved by EPA.</p>

Tips for Review of SIP Requirements

Issue	Explanation	What to Look For
Use of alternative test methods not approved into the SIP	Alternative test methods must be pre-approved by EPA through the appropriate process, e.g. SIP revisions. Alternative test methods may not be approved through the title V Permit issuance process.	<p>Make sure any test methods required by the permit are either:</p> <ul style="list-style-type: none"> • approved into the SIP, or • EPA reference test methods <p>Note that permit language allowing an “alternate and equivalent test method” should be corrected to allow only an “alternate and equivalent test method approved by EPA.”</p>
Use of generic grouping of emissions units	White Paper I allows for the generic grouping of emission units (see pp 9 and 10) provided (1) the class of activities or emissions units subject to the (generic) requirement can be unambiguously defined in a generic manner and where (2) effective enforceability of that requirement does not require a specific listing of subject units or activities.	Look for permit terms that generically group emission units (e.g., baghouses subject to the same grain loading rule). Are the activities unambiguously defined in a generic manner and does enforceability of that requirement require a specific listing? Be aware that this can apply regardless of the size of the unit

Guidelines

Applicable Requirements:

NSPS and NESHAP

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How Do I Review the Permit for NSPS and NESHAP Requirements?

The requirements in each subpart can be lengthy and complex but there are some key guidelines to follow when reviewing permits for sources that may be subject to any of the requirements:

Determine whether any of the standards apply

- ▶ Check permit application and/or permit to identify what type of emission units are located at the facility and whether the source emits any pollutants regulated by the standard(s) (e.g., list of hazardous air pollutants is found in CAA §112(b)).
- ▶ Applicability criteria are listed in the first section of each standard (e.g., 60.40 for Subpart D facilities) and some key definitions are listed in the general provisions sections.
- ▶ Information provided in the permit or in the supporting documentation should include:
 - maximum size and type of emissions unit (e.g., 250 MMBTU/hr boiler);
 - fuel type (e.g., natural gas);
 - the date unit was constructed and whether any modifications have occurred, (if the source is claiming an exemption based on the construction date).
- ▶ Permits may include requirements that limit the potential to emit of the source to avoid an applicable requirement. The permit conditions establishing these limits must be enforceable as a practical matter and establish clear compliance requirements.

Are the emissions limits included in the permit? Part 70 and clarifying language in White Paper II require permits to include limits.

Are all other applicable requirements of the standard in the permit, including an adequate level of detail to ensure the source's compliance obligations are clear? Incorporation by reference is okay as long as the referenced material is clear and available to the public.



What Are They? NSPS (Part 60), pre-1990 NESHAPs (Part 61) and post-1990 NESHAPs (also known as MACT-standards -- at Part 63) are separate applicable requirements that, in general, apply to a variety of specific **emission units** or **processes** located at stationary sources. Each standard contains a general provisions section (subpart A) in addition to numerous subparts that describe the requirements with which the affected source owner must comply.

Guidelines: Applicable Requirements: NSPS and NESHAP

Table 1 - Summary of NSPS and NESHAP Requirements^b

Standard	Size and Type of Unit, Process or Facility	Applicability Criteria	Pollutants Regulated
NSPS -- New Source Performance Standards (40 CFR Part 60)	In general, standards focus on emission units or processes that are called “affected” facilities. The affected facility may be located at either a major or a minor ^a source. Once a unit becomes an affected facility, it cannot avoid the standards by limiting emissions as a synthetic minor.	NSPS standards apply to the “affected facility.” An emission unit (or facility) becomes an affected facility if after the standard’s effective date either: <ul style="list-style-type: none"> the facility commences construction on a new emissions unit and the unit becomes an affected facility; or, an existing facility: <ul style="list-style-type: none"> undergoes a “modification” as defined in §60.14; or is reconstructed as defined in §60.15. 	In general, the standards regulate criteria pollutants. Some standards may regulate non-criteria pollutants (e.g., H ₂ S). Check the specifics within each standard.
pre-1990 NESHAP – National Emissions Standard for Hazardous Air Pollutants (40 CFR Part 61).	Standards focus on sources that emit certain levels of specific hazardous air pollutants. Standard could apply to either area ^a sources or major sources.	Applies to both new and modified sources. Upon modification (§61.15), any existing source shall become a new source for each HAP for which the rate of emissions increase.	Focus on specific HAPs (pre-1990) list identified in §61.01. Not aimed at controlling criteria pollutants.
Post-1990 NESHAP also known as MACT (Maximum Achievable Control Technology) Standards (40 CFR Part 63)	In general, standards focus on emission units or processes that are called “affected” facilities. Most standards affect major HAP sources: 25 tpy for combined HAPs or 10 tpy for any single HAP. Several standards established for stationary sources that are considered area sources (e.g., batch degreasers).	Applies to existing, new and reconstructed major HAP “affected sources” as defined in §63.2. Each standard defines affected source as it relates to the specific standard. Even though five area sources have been deferred from the requirement to obtain a title V permit until at least 12/9/1999, area source emission units (e.g., degreaser) may be located at title V facility and the post-1990 NESHAP requirements would need to be included in the title V permit.	Focus on specific HAPs (post-1990) list identified in §112(b). List includes pre-1990 NESHAPs. Not aimed at controlling criteria pollutants.

^aMost CAA requirements for criteria pollutants refer to non-major sources as “minor” sources. Post -1990 §112 standards define non-major sources as “area sources.”

^bThe standards apply regardless of the attainment status where the source is located.

How Can I Determine if a NSPS Applies?

1. Know your definitions:

Existing Facility (§ 60.2): means any apparatus of the type for which a standard is promulgated in this part, and the construction of which commenced *before* the date of the proposal of that standard.

Affected Facility (§ 60.2): means, with reference to a stationary source, any apparatus to which a standard applies.

Modification (§ 60.2 and § 60.14): means any physical change in, or change in the method of operation of, an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies.

An existing facility, upon modification, becomes an affected facility *if there is an emissions increase*.

Reconstruction (§ 60.15): means the replacement of components of an existing facility (i.e., a facility that was constructed prior to the effective date of the subpart), to such an extent that:

- ▶ the fixed capital costs for the replacement of components exceed 50% of the fixed capital costs that would be required to construct a comparable entirely new facility; and
- ▶ it is technically feasible to meet the applicable NSPS standards

An existing facility, upon reconstruction, becomes an affected facility subject to NSPS *irrespective of any change in emissions rate*.

2. In addition to the above definitions, be aware of the following information and questions that could be helpful in making an NSPS applicability determination:

- ▶ Know your dates. Each subpart will have an effective date. Did the source commence construction, reconstruct or modify after the effective date?
- ▶ Has the source requested a shield from a NSPS standard based on a determination that the NSPS does not apply? If so, then check whether construction dates are included, and if they provided information on other applicability criteria (e.g., the size and type of the equipment).
- ▶ For reconstruction evaluations, cost information may be obtained from the source.
- ▶ Have there been any physical changes at the source that have resulted in an emissions increase at the source?

In summary, there are several ways an emissions unit can be an **affected facility** subject to an NSPS:

1. It is subject because it meets all the applicability criteria (size, type of fuel, commenced construction after effective date) in the NSPS standard.
2. It was an “existing facility” that undergoes a **reconstruction**.
3. It is an “existing facility” that undergoes a **modification**.

Part I -- Tips For Reviewing NSPS Requirements	
Does the Permit...	What to Look For
...correctly include all NSPS requirements in the title V permit?	The general requirements (notification and recordkeeping requirements in 60.7) of the NSPS can be incorporated by reference (IBR) into title V permits. After the emission limits for source specific emission units are listed in the permit, compliance requirements can be IBR provided the compliance requirements are clear.
...provide enough information (in statement of basis or other supporting documentation) to justify this applicability determination? For example, if a process unit in an NSPS industrial category has been determined not to be a subject facility, does source provide information?	You can't shield NSPS unless statement of basis shows why the requirements are not applicable and that no modifications/reconstructions have occurred. To determine applicability, look for maximum capacity of the process unit and date of construction or modification of the process unit. Also check the review report for any descriptions that might indicate modifications. Shield should state the source has not modified as defined in §60.14.
...address whether past modifications have triggered NSPS requirements? For example, if unit claims exemption and was constructed before the applicability date, but the permit notes that it has been since modified or reconstructed, does the modification meet the definition in §60.14 or the definition of reconstruction in §60.15?	It's helpful if the statement of basis includes information provided by the company such as "the unit was constructed in 1968 and has not been modified since." Significant data will be required to determine if definitions in §60.14 or §60.15 have been met.
...state that the initial source test requirement has been fulfilled? (The statement of basis should document that this has been addressed.)	Each facility subject to NSPS must be tested within 60 days of achieving the maximum production rate but no later than 180 days after startup. The owner or operator must give EPA advance notice of the test, and provide EPA a written test report (§ 60.8). Appropriate test methods and other related specifics are given in each subpart. The test methods themselves are provided in Appendix A of 40 CFR 60. Most NSPS facilities in the title V process should already have fulfilled this requirement. If initial test has not yet been performed, source must include a compliance schedule in the permit for such tests.

Part I -- Tips For Reviewing NSPS Requirements	
Does the Permit...	What to Look For
...include correct emission limits and averaging times for each pollutant for which there is an NSPS standard? Or, are appropriate design and maintenance requirements included (e.g., requirement to install floating roof)?	In some cases, this is complicated, as the limit can depend upon the type of fuels or process, etc. Sometimes the permit does not include enough detail to calculate a limit as a check against the permit limit. When this happens, you must decide if it's worth the extra time to call the permit writer, get the details, and re-do the calculation performed by the permit writer.
...include all the correct monitoring requirements? For example, do equipment-based and work practice standards (e.g., an internal floating roof) have NSPS regulatory installation, maintenance monitoring, and reporting requirements to assure emission reductions?	<p>Most subparts should have compliance standards, but some older standards, e.g., Part 60 subpart K, may need gapfilling. Look to more recent subparts of the same source category for other ideas. Types of monitoring for NSPS sources include:</p> <p>(I) the installation, certification and operation of a CEMS or COMS or other "process" CMS (e.g. pressure drop or temperature). Performance specifications of monitors or a specified accuracy for process-CMS should reference Appendix B. Some NSPS subparts provide that CEMS data will be used for <i>determining</i> compliance, as opposed to <i>indicating</i> compliance. For direct-compliance monitors, Appendix F, which contains CEMS quality assurance requirements, also applies and should be referenced in the permit. Authority behind monitoring requirements can be found both in the individual subparts and in §60.13.</p> <p>(ii) Technology-based standards rely heavily on routine inspection of installed emission control equipment; inspections are important to assure proper maintenance and operation of equipment.</p> <p>(iii) Some work practice regulations (e.g. leak detection and repair) rely exclusively on thorough monitoring to achieve emission reduction.</p> <p>(iv) Federal standards proposed after 1990 are presumed to have adequate monitoring to satisfy Part 70's periodic monitoring requirement.</p>

Part I -- Tips For Reviewing NSPS Requirements	
Does the Permit...	What to Look For
<p>...include Recordkeeping and Reporting requirements that match what NSPS requires? (Records kept depend upon applicable subpart).</p>	<p>(I) Although each subpart contains specific reporting requirements, §60.7 also provides authority for reporting requirements. For example, the excess emission summary reports described by §60.7© should be included where applicable, and the permit should state reporting frequency (depends upon the subpart.)</p> <p>(ii) Excess emission reporting as specified in the applicable subpart can be quarterly, semi-annual, or initially quarterly with a subsequent semi-annual option for facilities without exceedances. Instead of reporting excess emissions, some facilities must report deviations from the parameters they are required to monitor. Other reporting requirements include notification of construction, anticipated startup, actual startup, and source testing. Most often, the source has already fulfilled these requirements.</p> <p>(iii) Since Part 60 references subpart A, it should be incorporated by reference into the permit.</p> <p>(iv) NSPS requirements should not be shielded unless the statement of basis has addressed why the facility is not subject to NSPS.</p>

Part II -- Tips For Reviewing NESHAP Requirements	
Does the Permit...	What to Look For
...include all NESHAP requirements?	<p>The permit must contain an adequate level of detail for requirements to ensure the compliance obligations of the source are clear. Issues to watch for:</p> <ol style="list-style-type: none"> 1. Does standard allow multiple compliance options? If so, make sure the options are clearly identified in the permit. 2. What level of detail is contained in the permit? Does the permit list each subject emission unit and its compliance obligation? 3. Are the General Provisions portion of the standard included in the permit? Part 70 permits may include reference to the general provisions portion of Part 61 or Part 63. 4. Does the permit include statements that allow the APCO or the Director to approve alternative standards or compliance mechanisms where no authority (vis-a-vis delegation) has been granted? (See list of authorities that cannot be delegated, p. III-16) <p>See level of detail for more information and Enclosure B of the EPA letter to STAPPA (Attachment G).</p>
...or supporting documentation provide enough information to justify exemption from standards that otherwise would apply? For example, if a process unit is a NESHAP affected source, but has been determined to be exempt from certain standards or requirements, the source must justify the exemption.	Much like the NSPS applicability requirements above, the NESHAP requirements must include details in the summary report or statement of basis describing the non-applicability of a NESHAP.
...include correct emission limits and averaging times for each pollutant for which there is a NESHAP standard? Or, are appropriate design and maintenance requirements included?	Emission limits must be included for each subject emission unit. Permit conditions must also clearly identify the compliance obligations of the source. Cross-referencing is allowed if the material referenced is available to the public and the information is unambiguous.
...include correct NESHAP monitoring, recordkeeping and reporting requirements for both the proper subpart and the general requirements?	Many of the NESHAP requirements contain multiple compliance options. The permit must clearly state which options the source will follow. The source may choose to include various compliance options as alternative operating scenarios.
...incorporate NESHAP startup shutdown and malfunction plans by reference? (§63.6(e)(3)(I)) Further, does the permit require sources to develop and implement SSM plans consistent with 63.6(e)(3)(I)?	General Provisions Section 63.6(e)(3)(I) allows the startup shutdown and malfunction plans to be incorporated by reference in the title V permit. Does the permit include such a reference? Be aware that this general provision may be over-ridden by a specific NESHAP requirement that requires more detail in the title V permit. If more detail is required by a specific NESHAP, does the permit contain sufficient detail? (see practical enforceability guidelines).

Part II -- Tips For Reviewing NESHAP Requirements	
Does the Permit...	What to Look For
...include reference to subpart A; is it incorporated by reference into the permit?	All permits that rely on Subpart A should, at minimum, incorporate it by reference.
...include a NESHAP for which there is a future effective date?	The title V permit must include any NESHAP that has been promulgated or approved by EPA through rulemaking at the time of issuance but have future-effective compliance dates (see definition of “applicable requirement” at §70.2). Resource: Check the most recent NESHAP information (EPA Website is a good place to look) to find which standards have been promulgated at the time of your permit review.

**Questions related to NESHAP and Level of Detail
from Enclosure B of May 20, 1999 letter to
STAPPA/ALAPCO (see Attachment G):**

GENERAL

- 1. Retrospective application of 112(g)**
- 2. Issuance of the permit before MACT compliance details are available**
- 3. Changes in the selected compliance option**
- 4. “Once-In-Always-In” and pollution prevention**

LEVEL OF DETAIL FOR POINT SOURCES

- 5. Use of generic groups that do not identify specific emission units**
- 6. Incorporation of multiple compliance options into Title V permits**
- 7. Level of Detail Needed to Incorporate General Provisions into Permits**
- 8. Level of Detail Needed to Incorporate MACT Standards into Permits**

LEVEL OF DETAIL FOR NON-POINT SOURCES

- 9. Identification of wastewater streams subject to MACT in the Title V permit**
 - 10. Specification of requirements for fugitive and wastewater sources**
 - 11. Specification of operating parameters in the permit**
 - 12. Incorporation of startup, shutdown, and malfunction plans, operating and maintenance plans, and periodic reports in Title V permits**
-

Toxics New Source Review (Section 112(g)) and Title V

Section 112(g) of the CAA applies to major new or reconstructed sources of HAP if a MACT standard has not yet been promulgated for the applicable source category. Where a MACT standard has not yet been promulgated for that new source, 112(g) requires that a source propose, receive approval for, and install MACT. Unless specifically exempted, all owners or operators of major HAP sources constructing or reconstructing after June 29, 1998 must comply with this requirement.

EPA Review of 112(g) MACT Determinations

EPA's role in reviewing and approving the case-by-case MACT determination depends on whether the permitting authority has submitted a 112(g) program certification to EPA. The purpose of the certification is to show that the permitting authority has a program through which they can implement 112(g) requirements. Permitting authorities now have until December 2000 to submit their certifications to EPA.

If the 112(g) program certification has been submitted to EPA,

- The permitting authority must give opportunity for public comment (through its Notice of MACT Approval or other procedure as outlined in program certification) on the MACT determination.
- The MACT determination may be placed either directly into the title V permit, or into a construction permit.
- If the MACT determination is not placed directly into the source's title V permit, through requirements into either a construction permit or a title V permit, the 112(g) determination must still be incorporated into the title V permit, either at initial permit issuance, or through a significant revision to the title V permit.

If the 112(g) program certification has not been submitted to EPA,

- The permitting authority may make the MACT determination, but must obtain EPA concurrence, OR
- The permitting authority may request that EPA do the MACT determination.

In all cases, EPA will have the opportunity to review the MACT determination.

Tips for Permit Review

If there are new or reconstructed HAP-emitting units (units constructed after June 29, 1998) at the facility you are reviewing, and there is no MACT standard yet promulgated for these units, consider whether the units have triggered 112(g):

- 112(g) applies to new major HAP sources (where the emissions from the new source alone are equal to or greater than 10 tons per year of any HAP or 25 tons per year of any combination of HAP).

Guidelines: Applicable Requirements: NSPS and NESHAP

- 112(g) also applies to reconstructed major sources, even if the net emissions increase is not in itself major. A unit is considered to be reconstructed if the cost of the project exceeds 50% of the cost of a comparable new unit. See the full definition of reconstruction in §63.41.
- Only the new or reconstructed units are subject to 112(g), not the entire facility.
- Netting is not allowed under section 112(g), but sources may avoid triggering 112(g) by limiting PTE below the 112(g) 10 tpy/25 tpy applicability levels.
- Specific exemptions from 112(g) are listed in §63.40.

To review a 112(g) determination:

- Guidance on new source MACT determinations can be found in the preamble to the 112(g) rule (61 FR 68384, December 27, 1996). There is no guidance document specifically for 112(g) for doing new source MACT determinations. However, guidance can be found in the Guidelines for MACT Proposal Determinations under Section 112(j), May 1994, EPA 453/R-94-026. The analysis for doing new source MACT determinations is the same regardless of whether it is done under the authority of section 112(d), (g), or (j). Case-by-case MACT cannot be less stringent than BACT.
- T-BACT determinations may be used for 112(g) purposes in California.

Delegation of Discretionary Authority Related to Air Toxics

Background:

Under the General Provisions (subpart A) of 40 CFR Part 63, the EPA Administrator has the authority to approve certain changes to, or make decisions under, specific General Provisions requirements (e.g., general emission standards, monitoring requirements, etc.). But does this same authority extend without question to the APCO or Director of a state or local air program when they are delegated the authority to implement Part 63? Below is a short table of the General Provisions that cannot be delegated to the state or local agency. Please refer to the July 10, 1998 memo from John Seitz in Appendix C for more information on which sections of the General Provisions can be delegated.

How this relates to permit review:

In the review of title V permits, be aware that permits may contain language that inappropriately allows APCO or Director the discretion to make important decisions related to Part 63. Check the delegation agreement to see if it allows such discretion (Note: even if the delegation does allow the discretion, check the July 10, 1998 memo to ensure the delegation is consistent with current policy). If the delegation is incorrect, notify the appropriate Region IX contact; and identify it in a comment letter to the District. If the delegation is silent on the particular section, notify the permitting authority in your comment letter that the discretion is not allowed.

Guidelines: Applicable Requirements: NSPS and NESHAP

MACT Authorities That **Can Not** Be Delegated

Section	Authority
Section 63.6(g)	Approval of Alternative Non-Opacity Emission Standards
Section 63.6(h)(9)	Approval of Alternative Opacity Standard
Sections 63.7(e)(2)(ii) and (f)	Approval of Major Alternatives to Test Methods (see Attachment 1 to full memo in Appendix C)
Section 63.8(f)	Approval of Major Alternatives to Monitoring (see Attachment 1 to full memo in Appendix C)
Section 63.10(f)	Waiver of Recordkeeping -- all

Source: Delegation of General Provisions memo dated July 10, 1998 from John Seitz to EPA Regional Offices.

The Following Information Appears in Appendix C:

- Delegation of General Provisions memo dated July 10, 1998 from John Seitz to EPA Regional Offices.
- December 3, 1998 memo to Region X from Thomas Curran, Director, Information Transfer and Program Integration Division, OAQPS, entitled, "Area Source Deferrals and Exemptions from Title V Permitting"
- Website Information
 - A. Applicability Determination Index
<http://134.67.104.12/cfdocs/adiwww/adiwww.html-ssi>
 - B. Index of MACT subparts and recent updates
http://www.epa.gov/ttn/uatw/2_4yrstds.html Two and four-year standards
http://www.epa.gov/ttn/uatw/7_10yrstds.htm Seven and ten-year standards
 - C. 112(g) Question and Answers (Q&As)
<http://www.epa.gov/ttn/uatw/112g/qanda12g.html>

Guidelines:

Applicable Requirements:

New Source Review Permit Terms and Conditions

September 9, 1999

DRAFT (Rev. 1)

III-20

Overview

EPA and permitting authorities use a host of terms to refer to the various types of permits that may be issued at the federal, state and local levels. In this section of the guidelines, we define the terms we will be using, and discuss the requirements for incorporation of the terms and conditions of these permits into the title V permit and other related considerations.

Definition of Terms

NSR permit – Throughout the following discussion when we say “NSR permit” we mean any permit issued pursuant to regulations approved or promulgated through rulemaking under title I including parts C or D of the Act, (including preconstruction permits that may be called “Authority to Construct,” “Installation Permit,” or “Permit to Construct.” For purposes of this discussion, the term “NSR” includes major nonattainment NSR programs, PSD programs, and 110(a)(2)(C) programs (minor NSR).

Permit to Operate – In this discussion, a “Permit to Operate” refers to a permit issued by a state or local District, pursuant to a locally adopted State or District operating permit program that may or may not be SIP-approved. A Permit to Operate regulates the on-going *operation* of either major or minor stationary sources of air pollution. Typically, a Permit to Operate is issued after the construction is completed in accordance with the NSR permit. (Do not confuse “permit to operate” with the CAA Title V “operating permits” program).

SIP-Approved Permit -- In this discussion, a “SIP-Approved Permit” is a permit issued pursuant to major or minor NSR or prevention of significant deterioration (PSD) permit programs approved into SIPs (or promulgated under 40 CFR § 52.21 in States implementing the federal PSD program via delegation from EPA), as well as State operating permits issued pursuant to the SIP such as federally-enforceable State operating permits (FESOPs) and some Permits to Operate. In many States, an NSR permit is subsequently converted to a Permit to Operate leaving the preconstruction permit void. In other States, there is not a separate construction permit (i.e., single permit system).

Why Review Permits for Terms and Conditions from SIP-Approved Permits?

Below are five very important reasons why the title V permit should be reviewed to determine whether terms and conditions from SIP-approved permits are properly incorporated into the Title V permit:

1. As defined in Part 70, and in all State Part 70 programs approved by EPA, terms and conditions issued pursuant to regulations approved or promulgated through rulemaking

Guidelines: Applicable Requirements – NSR Permit Terms and Conditions
pursuant to title I are applicable requirements that must be included in the title V permit.¹

2. All terms and conditions from SIP-approved permits should be transferred accurately to the title V permit.
3. Terms and conditions from SIP-approved permits should be properly identified as applicable requirements and cannot be identified as “non-federally enforceable,” or “state-only.”
4. EPA has the authority to review past NSR determinations and omissions during our review of the Title V permit. Were all past NSR determinations correctly made at the time the NSR permit was issued?
5. Title V permits must not contain language that would supersede or void the underlying applicable terms and conditions from SIP-approved permits.



Important! As described below, omission or improper incorporation of permit terms and conditions from SIP-approved permits involves several controversial issues, some of which are case specific. If, during your review, you find problems, discuss the issues with other staff and management.

What Information Do I Need Before I Begin My Review?

- Check to make sure the Permitting authorities provided previously issued NSR permits or current Permits to Operate in the Statement of Basis for the title V permit. If we issued any PSD permits to the source obtain the permit file and/or check SSTS database on Lotus Notes.
- Check to see if EPA Region 9 or the public provided comments in the past about any NSR applicability determinations or permitting decisions made during the NSR-phase of the permit. Again, check our files or SSTS for any past comment letters.

¹ If a state does not want a SIP provision or SIP-approved permit condition to be listed on the Federal side of the Title V permit, it must take appropriate steps in accordance with title I substantive and procedural requirements to delete the conditions from its SIP or SIP-approved permit.

Guidelines: Applicable Requirements – NSR Permit Terms and Conditions

The following is a list of questions to ask yourself when reviewing title V permits for NSR permit terms and conditions. Discussion on each of these questions follows.

- Does the Title V Permit Contain Terms and Conditions from SIP-Approved Permits?
 - Are Terms and Conditions from SIP-Approved Permits Accurately Transferred to the Title V Permit and Properly Included as Applicable Requirements?
 - Were Past NSR Determinations Correctly Made at the Time the NSR Permit was Issued or Revised?
 - Does the Title V Permit Contain any Language that Would Allow the Title V Permit to Void or Supersede Existing SIP-Approved Permits?
-

Does the Title V Permit Contain Terms and Conditions from SIP-Approved Permits?

In general, title V permits will contain terms and conditions from SIP-approved permits because most title V sources have previously been issued NSR permits for construction of new or modified emission units. Such terms and conditions are applicable requirements and the origin of and authority for each condition should be identified in the title V permit. In general, check the conditions in the title V permit to see if SIP-approved permit numbers and/or rules are cited as the origin of and authority for the condition.

As part of a complete submittal, permitting authorities should include all ATC or current PTO permits (if applicable and not already provided in previous correspondence) before our 45-day review clock can begin (see CAPCOA Title V Attachment, Appendix B).

The following are title V sources may not have any terms and conditions from SIP-approved permits listed in the title V permit:

- An old source that performed all construction of emission units prior to federal CAA permitting requirements (pre-1970 source) would not originally have been required to obtain an NSR permit. If this is the case, also confirm that the source has not modified since its construction in a way that would trigger the requirement for an NSR permit.- (Note: It is likely that the source will have a permit to operate even if NSR was never triggered.)
- A source operating in Indian Country with emissions below PSD thresholds (<250 tpy) but above Title V thresholds (>100 tpy).

Are Terms and Conditions from SIP-Approved Permits Accurately Transferred to the Title V Permit and Properly Included as Applicable Requirements?

This is a very important question to ask yourself during your review of the title V permit. First, the terms and conditions from the SIP-approved permit should be **accurately** transferred to the title V permit. Some permitting authorities may consider the transfer a good opportunity to “clean up” the SIP-approved permit (e.g., rewrite conditions, remove conditions, etc). When comparing the SIP-approved permit to the title V permit check for the following:

- Are all conditions from the NSR SIP-approved permit transferred to the title V permit?
- Have the conditions been re-written?
- Are the conditions in the title V permit enforceable as a practical matter? This is an issue regardless of whether the permitting authority has changed the SIP-approved permit.
- If terms and conditions from the SIP-approved permit have been removed, did the permitting authority follow the substantive and procedural requirements of the SIP-approved permit rule?

Second, Federal law requires all terms and conditions in a permit issued under any SIP-approved permit program to be federally enforceable (see 40 CFR §52.23 and letter dated May 20, 1999 from John Seitz to STAPPA/ALAPCO - Attachment G). This is a long-standing federal requirement that we recently reiterated in the referenced policy. The enactment of title V did not change the fact that all terms and conditions in SIP-approved permits are federally enforceable. If a State does not want a SIP provision or SIP-approved permit condition to be listed on the Federal side of a title V permit, it should take the appropriate steps in accordance with title I substantive and procedural requirements to delete those conditions from its SIP or SIP-approved permit.

Why is it Important to Review Title V Permits for Past NSR Determinations?

The title V permit for a source must assure compliance with all applicable requirements. If a NSR permit was not issued in the past, and should have been, then the source is not in compliance with the requirement to obtain a NSR permit as required in Title I of the CAA.

Were All Past NSR Determinations Correctly Made at the Time the NSR Permit was Issued or Revised?

Pursuant to EPA policy, the Agency generally will not object to the issuance of a title V permit due to concerns over BACT, LAER, or related determinations made long ago during a prior preconstruction permitting process. However, regarding recently issued NSR/PSD permits, note that EPA policy is to provide adverse comments concerning the substantive or procedural deficiencies of a preconstruction permit during the NSR/PSD permitting process. EPA may thereafter take corrective action, including objecting to the title V permit if its comments were not resolved by the State. Similarly, where the BACT/LAER determination is made during a concurrent or “merged” preconstruction permit and title V permit process, EPA may object to the title V permit due to an improper determination. Finally, the Agency may object to or reopen a title V permit in response to a public petition showing that title I preconstruction permitting requirements have not been met.

Moreover, where EPA believes that an emission unit has not gone through the proper preconstruction permitting process (and therefore one or more applicable requirements are not incorporated in the draft or proposed title V permit), EPA may object to the title V permit. The permitting authority may then resolve the issue either by demonstrating to EPA’s satisfaction that preconstruction permitting requirements were not applicable or by incorporating a schedule requiring the source to obtain a preconstruction permit.

Where an EPA Region is unable to obtain adequate information during its review period to support an objection, the permit may be issued with “placeholder” language stating that the permit shield does not attach to the emission units at issue. In such instances, the permitting office should also consider a referral to the enforcement office for further investigation. The placeholder language would say that while EPA is evaluating the applicability of the PSD/NSR program, a permit shield is not available with respect to applicability of PSD/NSR and that additional applicable requirements may apply should EPA’s evaluation show that PSD/NSR applies. If EPA determines that the source is not subject to any additional requirements, the permit can be reopened to provide a permit shield with respect to these requirements.

For more information on this policy refer to the May 20, 1999 letter to Robert Hodanbosi from John Seitz in Appendix G.

Watch Out!

Title V permits may contain **permit shields** for sources from underlying NSR SIP rules or the requirements to obtain a permit. The part 70 permit cannot shield a source from past noncompliance arising from previous applicability determinations (see § 70.6(f)(3)(ii)). Such noncompliance is also subject to enforcement. As described in the Permit Shield Section of these Guidelines, emission limits from permits can, of course, be shielded if a proper streamlining demonstration is provided that clearly shows how the permit incorporates the limit and assures compliance with the applicable permit limit. For more information on past NSR noncompliance issues in title V, refer to EPA's May 20, 1999 letter to STAPPA (NSR Lookback Section of Enclosure A) in which we clarify a commonly mis-interpreted section of White Paper I.

Does the Title V Permit Contain Any Language that Would Allow the Title V Permit to Void or Supersede Existing SIP-Approved Permits?

Title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. In enacting title V, Congress did not amend title I of the Act and did not intend the title V permitting program to replace the title I permitting programs. SIP-approved permits must remain in effect because they are the legal mechanism through which underlying NSR requirements (from the Act, federal regulations and federally-approved SIP regulations) become applicable, and remain applicable, to individual sources.

Problems that would occur if Title V permits did supersede SIP-approved permits:

- Neither EPA nor the District could reopen title V permits if that permit failed to include all terms and conditions of SIP-approved permits.
- Neither EPA nor the District could make necessary corrections upon permit renewal if the SIP-approved permit was no longer in place.
- If the title V permit supersedes the source's SIP-approved permit and then subsequently expires, neither the superseded SIP-approved permit nor the expired title V permit would provide the legal authority to enforce the site-specific operational requirements and restrictions imposed upon the source pursuant to preconstruction review.

The fact that compliance with the title V permit may be “deemed compliance” with underlying applicable requirements, including applicable requirements contained in SIP-approved permits, indicates that those underlying requirements must remain in force and may not be superseded.

The following are examples of supersession language in title V permits:

- "These permit conditions supersede all conditions mentioned in earlier permits issued to the facility."
- “The permit conditions in this section will supersede all conditions mentioned in the existing District PTO for the air emission units at the facility.”
- “Upon issuance of the Title V permit, the underlying NSR permit shall expire.”

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Guidelines:

Applicable Requirements:

Acid Rain

September 9, 1999

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III-30

What Are Acid Rain Permits?

Utilities and other facilities which combust fossil fuel and generate electricity for wholesale or retail sale may be subject to title IV acid rain program requirements, such as SO₂ and NO_x emission limitations and/or monitoring, recordkeeping, and reporting requirements. Acid rain sources subject to emission limitations must have an acid rain permit. The acid rain permit must be issued using the same procedures as a title V permit and must be included in the title V permit.

Section 408 of the CAA states that “The provisions of [title IV] shall be implemented...by permits issued to units subject to this title (and enforced)

How Do I Review the Permit for Acid Rain Requirements?

First, determine if the source has any units subject to SO₂/NO_x regulations under the Acid Rain Program:

If the units are fossil-fired units that generate electricity for sale and fall into any of the following categories, refer to 40 CFR 72.6 for complete details on determining applicability and exemptions:

- The source is one of the old (pre-1990) large sources of SO₂ listed in Table 1, 2, or 3 of 40 CFR 73.10, or
- The source existed prior to 11/15/90 and has either increased to > 25 MW or added auxiliary firing since 11/15/90, or
- The source is a new (post 11/15/90) fossil fuel-fired combustion device.

Common **exemptions** to check for in 40 CFR 72.6 include: 1) pre-1990 simple combustion turbines, 2) cogeneration facilities, 3) independent power production facilities, and 4) solid waste incinerators.

If the source has units subject to regulation of SO₂/NO_x under the Acid Rain Program, make sure that the title V permit contains:

The following Acid Rain boilerplate language:

“Emissions from this source shall not exceed any allowances that the source lawfully holds under title IV of the Act or its regulations. [§70.6(a)(4)]”

Guidelines: Applicable Requirement: Acid Rain

“Where an applicable requirement of the Act is more stringent than an applicable requirement of title IV regulations, both provisions shall be incorporated into the permit and be enforceable by the Administrator. [70.6(a)(1)(ii)]”

An Acid Rain Permit: All sources subject to Acid Rain Regulations were required to have an Acid Rain Permit (issued by the local permitting authority or EPA’s Acid Rain Division) in place by at least January 1, 1999, and much earlier in certain cases. Thus, title V permits for all sources subject to Acid Rain should now include the Acid Rain Permit as part of the title V permit. When reviewing the Acid Rain Permit, check to make sure the permit contains each of these sections:

- Statement of Basis
- SO₂ allowances and NO_x requirements for each affected unit
- Comments, notes, and justifications
- Permit application (must be included or incorporated by reference)

Refer to Appendix C of these guidelines for a sample Acid Rain Permit. If the Acid Rain Permit does not follow the form of the sample permit in Appendix C of these guidelines, you should initiate a discussion with the permitting authority and EPA’s Acid Rain Division for further explanation.

If the Acid Rain Permit is Missing from the Title V Permit:

While permitting authorities may be aware of some facilities that are subject to the Acid Rain Program, it is very possible that facilities that should be subject have been overlooked. For example, facilities that once qualified for an exemption, such as cogeneration facilities, may lose their status as “exempt” if certain conditions regarding the facility change. Thus, the applicability criteria above should be checked for each permit reviewed. In case of any confusion regarding the applicability of the Acid Rain Regulations to a specific facility, EPA’s Acid Rain Division should be consulted for guidance.

If the source is subject to regulation under the Acid Rain Program and the Acid Rain Permit should have been issued by now according to Acid Rain Regulations (currently the case for all Acid Rain Permits), the title V permit must include the Acid Rain Permit. If you find the Acid Rain Permit is missing, first check with the permitting authority to see if the Acid Rain Permit has been issued. If so, the correction to the title V permit is simply to have the permitting authority add the Acid Rain Permit to the title V permit. Make sure that the permitting authority followed the public notice procedures under Part 70 for the Acid Rain portion of the permit, just as they would for all other parts of a title V permit. However, if the permitting authority indicates that the Acid Rain permit has not been issued yet but should have been, a compliance schedule for the title IV Acid Rain requirements must be added to the title V permit before EPA can approve the title V permit (see guidelines on compliance schedules).

Guidelines:

Applicable Requirements:

Other Applicable Requirements

September 9, 1999

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III-33

What Other Applicable Requirements Must Be Included?

The Part 70 definition of “applicable requirements” includes several other standards which must be addressed when reviewing a title V permit. The applicability and inclusion of many of these requirements is more straightforward than those already discussed in these guidelines. These “other applicable requirements” can be categorized as follows:

Standards that require “boilerplate” language in MANY title V permits: (see Part A below for boilerplate language)	Standards that only require permit language for a FEW types of sources: (see Part B below for applicability information)
<p>Stratospheric Ozone protection under CAA, Title VI</p> <p>Accident prevention requirements under CAA 112(r)(7)</p> <p>National Emission Standard (NESHAP) for Asbestos under 40 CFR Part 61, Subpart M</p>	<p>Requirements governing solid waste incineration under CAA 129</p> <p>Tank vessel requirements under CAA 183(f)</p> <p>Outer continental shelf source requirements under CAA 328</p> <p>For temporary sources, NAAQS, increment, and visibility standards under CAA, Part C of Title I</p>

40 CFR 70.2 gives a complete definition of “applicable requirements.”

When reviewing a permit for “other applicable requirements”:

- **Check for boilerplate language, listed in Part A below.** These standards will apply in many title V permits. Part A below describes how you figure out whether the boilerplate language should be included, and tells what the boilerplate language is.
- **Check if the source falls into any of the categories that requires additional permit conditions, listed in Part B below.** These standards only require permit language for the specific categories of sources to which the standards apply. Part B below describes which source category each standard applies to and gives general guidance on permit language to include if the standard is applicable.

PART A: What boilerplate language must be included in most or all permits?

For many sources, the following requirements apply or have the potential to apply over the permit term. Where requirements can be reasonably anticipated to apply over the permit term, EPA recommends that these requirements be included in the permit to avoid permit reopening at a later date.

1. Accident Prevention Requirements under CAA 112(r)(7)

Sources that handle, or use, more than a certain threshold quantity of any one of 200 listed substances/material are required to develop risk management plans (RMPs). Refer to 40 CFR 68.130 for a complete list of affected substances. More information can also be found at:

<http://www.epa.gov/swercepp/pubs/caa-faqs.html>

Applicability:	Boilerplate title V permit language:
CASE 1: When the source is already subject to Part 68 provisions, the following language should be included in the permit.	CASE 1 PERMIT LANGUAGE: “This stationary source, as defined in 40 C.F.R. section 68.3, is subject to part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by the date specified in section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 C.F.R. part 70 or 71.”
CASE 2: When the source could be subject to the rule in the future or wants flexibility to preclude permit reopening, the following language should be included in the permit.	CASE 2 PERMIT LANGUAGE: “Should this stationary source, as defined in 40 C.F.R. section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 C.F.R. part 70 or 71.”

2. Stratospheric Ozone protection under CAA, title VI

This program requires labelling, capture, recycling, and phase-out of certain compounds that have been determined to have the potential to react with and deplete stratospheric ozone.

Guidelines: Applicable Requirements: Other Applicable Requirements

Applicability:	Boilerplate title V permit language:
Anyone who owns an appliance containing a refrigerant classified as an ozone-depleting substance, or a source which falls under any of the other criteria listed in 40 CFR 82.150, is subject to Part 82, Subpart F (Recycling and Emissions Reduction). All of the following boilerplate language must be included in the title V permits of subject facilities.	<p>“Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.”</p> <p>“Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.”</p> <p>“Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.”</p>

3.National Emission Standard (NESHAP) for Asbestos, 40 CFR 61, Subpart M

This standard regulates the handling of any asbestos containing material.

Applicability:	Boilerplate title V permit language:
Recommend All title V permits contain the following language.	“Permittee shall comply with the requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects. [40 CFR Part 61, Subpart M]”

PART B: What other requirements must I evaluate for applicability?

Permit language is only required for the following standards for the specific categories of sources to which the standards apply. If the source falls into one of these categories, the permit must assure compliance with the limits or requirements of the standard. Thus, the permit must contain the requirements of the standard plus any additional monitoring, recordkeeping, reporting, and/or testing, as appropriate, to assure compliance.

1. Requirements governing solid waste incineration under CAA 129

Applicability: Under CAA 129, EPA has promulgated emissions standards and guidelines for incinerators that burn solid waste. These standards are contained within the New Source Performance Standards (NSPS, 40 CFR Part 60) both for medical waste incinerators (Subpart Ec) and municipal waste combustors (Subpart Eb). Refer to 60.50c and 60.50b, respectively, for specifics of the applicability of these regulations. Title V permits for sources subject to these regulations must assure compliance with the requirements of the standard (see guidelines section on NSPS).

2. Tank vessel requirements under CAA 183(f)

Applicability: This standard regulates the emissions of VOCs and any other air pollutant from loading and unloading of tank vessels. Refer to CAA 183(f) for specifics of applicability and requirements if the standard may be relevant to the source. Title V permits for sources subject to these regulations must assure compliance with the requirements of the standard.

3. Requirements of the Outer Continental Shelf Sources program under CAA 328

Applicability: If the standard may be relevant to the source, refer to 40 CFR 55.3 (Outer Continental Shelf Air Regulations) for applicability specifics requirements. Title V permits for sources subject to these regulations must assure compliance with the requirements of the standard.

4. For temporary sources, NAAQS, increment, and visibility standards under CAA, Part C of title I

Applicability: Permitting Authorities may issue a single permit authorizing emissions from similar operations at multiple temporary locations. Permits for such units shall include conditions that assure compliance with all CAA requirements including, but not limited to, ambient standards and compliance with applicable increment and visibility standards under part C. In addition, the permit must require the owner or operator to notify the permitting authority in advance of each change in location.

Guidelines:

Standard Permit Conditions

September 9, 1999

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III-38

What Are Standard Permit Conditions?

Part 70, primarily §70.6, contains a list of conditions that must appear in every permit. Because these conditions will be the same for all permits, they are often included in a section of the permit called "standard conditions" or "general requirements."

Why Review Standard Permit Conditions?

These conditions describe important compliance responsibilities for the source and authorities for the permitting authority and EPA. Typical problems that crop up in this part of the permit include missing requirements and language changes that affect the meaning of the permit condition. Because permitting authorities typically develop boilerplate language for these provisions, it is particularly important to pay attention to these provisions in the first permits received from each permitting authority.

Tips for Reviewing Standard Conditions

When reviewing a part 70 permit, use the "Checklist for Review of Required Conditions in the Title V Permit" below to determine if all of the required conditions are included.

- Approved local part 70 rule language sometimes differs from the part 70 language. Where the permit language differs from the part 70 language in the checklist below, make sure the wording matches that in the local rule.
- Also, check the interim approval notice to see if any interim approval issues dealing with standard permit conditions are identified.
- When looking for the standard conditions, be sure to check both the "standard conditions" section of the permit and the "source specific conditions" section of the permit, since permitting authorities will vary on where they include these requirements.

CHECKLIST FOR REVIEW OF REQUIRED CONDITIONS IN TITLE V PERMITS

Permit Terms Required by Part 70	Included in Permit?
Permit term - §70.6(a)(2) The permit term shall not exceed 5 years. (Acid rain permits shall have a term of 5 years.)	
Severability clause - §70.6(a)(5) In the event of challenge to any portion of the permit, the rest of the permit remains valid.	
Duty to comply - §70.6(a)(6)(I) The permittee must comply with all conditions of the permit. Noncompliance constitutes a violation of the Act and is grounds for enforcement; permit termination, revocation and reissuance, or modification; or for denial of permit renewal.	
Halting/reducing activity not a defense §70.6(a)(6)(ii) It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce activity in order to comply.	
Reopening for cause - §70.6(a)(6)(iii) The permit may be modified, revoked, reopened, or terminated for cause. Filing of request for permit action by permittee does not stay any permit condition.	
Reopenings for Cause - §70.7(f) The permit shall be reopened and revised if: <ol style="list-style-type: none"> 1. additional requirements become applicable and more than 3 years remain on the term of the permit; 2. additional acid rain requirements become applicable to the source; 3. the permit contains a material mistake or inaccurate statements were made in establishing terms or conditions of the permit; or 4. the permit must be revised or revoked to assure compliance with applicable requirements. 	
Property Rights - §70.6(a)(6)(iv) The permit does not convey any property rights of any sort, or any exclusive privilege.	
Duty to provide information - §70.6(a)(6)(v) The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also furnish copies of record required to be kept by the permit.	
Submission of confidential information. For information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.	

CHECKLIST FOR REVIEW OF REQUIRED CONDITIONS IN TITLE V PERMITS

Permit Terms Required by Part 70	Included in Permit?
Payment of Fees - §70.6(a)(7) Source must pay fees consistent with fee schedule.	
Changes provided for in permit - §70.6(a)(8) No permit revision shall be required for changes that are provided for in the permit.	
Certification of all documents - §70.5(d) Any application form, report, or compliance certification submitted pursuant to part 70 shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.	
Compliance certification - §70.6(c)(5) Source must certify compliance, at least annually, with the terms and conditions of the permit. The certification must include the identification of each term or condition of the permit that is the basis for certification, the method used for determining compliance, whether such method provided continuous or intermittent data, any other material information, the status of compliance, and identification of each permit deviation over the certification period. Compliance certifications shall be submitted to the Administrator as well as to the permitting authority.	
Inspection and entry - §70.6(c)(2) Upon presentation of proper credentials, the permittee shall allow the permitting authority or authorized representative to: <ol style="list-style-type: none"> 1. enter the facility; 2. access and copy records that must be kept under the conditions of the permit; 3. inspect facilities, equipment, practices, or operations regulated or required under the permit; and 4. sample and monitor at reasonable times for substances or parameters for the purpose of assuring compliance with applicable requirements. 	
Schedule of compliance - 70.6(c)(3)	
Permittee will continue to comply - §70.5(c)(8)(iii)(A) For requirements with which the source is in compliance, the permit shall contain a statement that the source will continue to comply.	
Permittee will comply with future requirements - §70.5(c)(8)(iii)(B) & §70.6(c)(3) For requirements that will become effective during the term of the permit, the permit shall contain a statement that the source will meet such requirements on a timely basis. <i>Note: The applicable requirement may specify a more detailed schedule, which would go into the permit</i>	

CHECKLIST FOR REVIEW OF REQUIRED CONDITIONS IN TITLE V PERMITS

Permit Terms Required by Part 70	Included in Permit?
<p>Source not in compliance If the source is not in compliance at the time of permit issuance, the permit must contain:</p> <ol style="list-style-type: none"> 1. a schedule of measures leading to compliance [§70.5(c)(8)(iii)(C)]; and 2. a schedule for submission of certified progress reports at least every 6 months [70.5(c)(8)(iv)] <p><i>Note: This provision is not necessary if source is in compliance. Check the compliance certification in the source's application to see if it is out of compliance and needs a schedule of compliance in the permit.</i></p>	
Recordkeeping	
<p>Records of required monitoring - §70.6(a)(3)(ii)(A) Where applicable, permit shall require records of required monitoring information that include the following:</p> <ol style="list-style-type: none"> 1. The date, place and time of sampling or measurement; 2. The date the analyses were performed; 3. The company that performed the analyses; 4. The analytical techniques or methods used; 5. The results of such analyses; and 6. The operating conditions as existing at the time of sampling or measurement. 	
<p>Record retention - §70.6(a)(3)(ii)(B) Records of all required monitoring data and support information must be retained for at least 5 years.</p>	
Reporting	
<p>Reports of Required Monitoring §70.6(a)(3)(iii)(A) Reports of all required monitoring must be submitted at least every 6 months. Reports shall identify all instances of deviations from permit requirements and must be certified by a responsible official.</p>	
<p>Prompt reporting of deviations - §70.6(a)(3)(iii)(B) The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, including the probable cause of the deviation and any corrective actions or preventative measures taken. "Prompt" should be set out in the permit.</p>	

Checklist for Review of Optional Permit Conditions That May Be Grouped with Standard Permit Conditions

Permit Terms Required by Part 70	Review If Included in Permit
<p>Emergency Provisions - 70.6(g) <i>NOTE: State part 70 program is not required to include this provision.</i> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.</p> <p>An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the following conditions are met.</p> <p>The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:</p> <ol style="list-style-type: none"> 1. An emergency occurred and that the Permittee can identify the cause(s) of the emergency; 2. The permitted facility was at the time being properly operated; 3. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and 4. The Permittee submitted notice of the emergency to the Director within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken. <p>In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>	

Checklist for Review of Optional Permit Conditions That May Be Grouped with Standard Permit Conditions

Permit Terms Required by Part 70	Review If Included in Permit
<p>Permit Shield</p> <p><i>NOTE: State part 70 program is not required to include this provision. If included, see Permit Shield review guidelines in this Section.</i></p> <p>Compliance with the terms of the permit shall be deemed compliance with applicable requirements as of the date of permit issuance provided that:</p> <ol style="list-style-type: none"> 1. such applicable requirements are included and are specifically identified in the permit; or 2. the permitting authority has determined in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination. 	
<p>Duty to supplement and correct - §70.5(b)</p> <p><i>NOTE: State part 70 program is not required to include this provision.</i></p> <p>If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.</p>	

Guidelines:

Practical Enforceability

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III-45

What is Practical Enforceability?

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions

- establish a clear legal obligation for the source
- allow compliance to be verified.

Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

Emission limits or other applicable requirements must have associated monitoring, recordkeeping, and reporting to make it possible to verify compliance and provide for documentation of non-compliance. (More information on monitoring to verify compliance is included in the Guidelines section on Periodic Monitoring.) Further, the permit must not prevent the use of *credible evidence* by the source, public, permitting authority, or EPA.

What is Credible Evidence?

Section 113(a) of the Act gives EPA the authority to bring enforcement actions “on the basis of *any information available* to the Administrator.” In an enforcement action, the court then decides whether the available information is *credible evidence* of a violation. Credible evidence includes (but is not limited to):

- The reference test method
- Other evidence that is comparable to information generated by the reference test method, such as
 - Engineering calculations
 - Indirect estimates of emissions
 - CEMS data
 - Parametric monitoring data

Data need not be required to be collected in a title V permit in order to be considered credible.

Since any credible evidence can be used to show a violation of or, conversely, demonstrate compliance with an emissions limit, it is important that permit language not exclude the use of any data that may provide credible evidence. The permit must specify the source’s obligations for monitoring in a way that does not establish an exclusive link between the test method and the emissions limit. Permit language may not

- Specify that only certain types of data may be used to determine compliance
- Specify that certain data is more credible than other types of data, or
- Include language that excuses violations under specific circumstances.

In general, the permit should simply tell the source what it must do (e.g., monitor pressure drop in such a manner, take corrective action under these conditions, etc.) For example, “The permittee shall monitor the emissions unit weekly in accordance with method X.”

It is not necessary to say that a term assures compliance or that an activity is required to assure compliance.

Why Review Permits for Practical Enforceability?

The practical enforceability of a permit should be reviewed to assure the public’s and EPA’s ability to enforce the title V permit is maintained, and to clarify for the title V source its obligations under the permit. Possible consequences of not examining the permit for practical enforceability include:

- source noncompliance due to misunderstanding unclear permit conditions,
- permit conditions creating new exemptions from requirements in the underlying applicable requirements, and
- permit language that allows noncompliance, or does not promote detection and prompt correction of problems leading to noncompliance.

The first table below identifies key permit terms to examine for practical enforceability. The second table provides examples of common language pitfalls and how they can be corrected.

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
Emission Limits <p>The title V permit may be used by a source to establish limits on potential to emit (PTE) for purposes of avoiding an otherwise applicable requirement.</p>	<p>Title V conditions must assure compliance with all applicable requirements. To assure that emission limits will be complied with, the limits must be written in a practically enforceable way. The title V permit must clearly include each limit and associated information from the underlying applicable requirement that defines the limit, such as averaging time and the associated reference method.</p>	<p>When reviewing an emission limit, make sure that</p> <ul style="list-style-type: none"> • The limit is clearly written, • The meaning of the applicable requirement has not been altered, • The averaging time is included, • The reference diluent concentration (e.g. "As determined at 15% O₂") is included, • The source is required to comply with the limit at all times unless exceptions are specifically allowed for by the applicable requirement, • The specific reference test method associated with the limit is identified, and • The number of test runs is specified (if not included in the reference method).
Potential to Emit Limits <p>The title V permit may be used by a source to establish limits on potential to emit (PTE) for purposes of avoiding an otherwise applicable requirement.</p>	<p>These emission limits are important because a source has agreed to comply with a limit set at a level below major source emission thresholds in order to not be subject to requirements such as NSR, PSD, or MACT. These types of limits are one of the few types of conditions that may be established solely in the title V permit, without an underlying applicable requirement. Since the title V permit is the mechanism for creating these limits, it is also the primary mechanism for assuring they are enforceable as a practical matter.</p>	<p>In addition to the general concerns for any emission limits listed above, PTE limit must also:</p> <ul style="list-style-type: none"> • Have short averaging times. Averaging times must be no longer than one day, or if set on a rolling basis, on a 12-month rolling average, calculated no less frequently than daily. • Otherwise meets the requirements of the June 13, 1989 Hunt/Seitz memorandum "Guidance on Limiting Potential to Emit in New Source Permitting."

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
<p>Director's Discretion</p> <p>This term refers to a permit condition that is phrased in such a way that the decision as to whether the condition is met is left to the director of the permitting authority.</p> <p>Example: "The source shall maintain adequate records, <i>as determined by the Director</i>" or "The source may use an alternative control device <i>if the Director finds that</i> equivalent emissions reductions would be achieved." or "or other as approved by the Director."</p> <p>as in</p> <p>"The reference test method is EPA Method 5 or other method approved by the Director."</p>	<p>This type of provision is problematic and should not be included in the permit. EPA and citizens would have difficulty disputing a finding by the Director that the source had met the requirements of that condition. In the first example, even if the facility was <i>not</i> maintaining adequate records, the condition is drafted in such a way that the permitting authority's determination that the records <i>are</i> adequate could preclude EPA or citizen action. Similarly, in the second example, as long as the Director found that the source's alternative control device was achieving equivalent emissions reductions, EPA or citizens would find it difficult to take action against the source.</p> <p>Director's discretion would allow the source to negotiate a different test method "off permit" and bypass the process required for approval of alternative test methods. Other test methods could be acceptable but must be specifically identified in the permit.</p>	<p>When reviewing a title V condition that allows Director's discretion,</p> <ul style="list-style-type: none"> • Check the underlying applicable requirement to see if it allows director's discretion. • Unless the underlying applicable requirement allows director's discretion (e.g. through SIP-approved rule), the language must be removed from the title V permit. • An acceptable alternative to Director's discretion language is to include specific options up front in the permit. <p>Example: "The source may use an alternative control device that achieves an overall control efficiency of 99%." or "The reference test method is EPA Method 5 or Local Method 5 as approved by the Director on 12/15/93."</p>

What Types of Conditions Affect Practical Enforceability?

Conditions Affecting Enforceability...	Why is it important?	What to Look for...
<p>Start Up/Shut Down and Malfunction Language</p> <p>In addition to the emergency provisions of 70.6(g), permits will sometimes contain excess emissions provisions. These provisions may have been created in the permit, or may come from rules designed to give special treatment to sources that emit in excess of their limits because</p> <ul style="list-style-type: none"> the source is unable to comply with the emissions limit during startup and shutdown, or process equipment or pollution control equipment breaks down. <p>These rules are usually called “excess emissions rules” or “startup/shutdown rules.”</p>	<p>If properly written, excess emission provisions only apply in situations where it is technologically impossible for the source to comply, or where circumstances beyond the source’s control cause it to exceed its emissions limits. However, if EPA has not approved the provision, it is probably because the provision excuses emissions that should be under a source’s control, or allows for Director’s discretion.</p> <p>See the memo “Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions” in Appendix D for more information relating to how these provisions may apply in SIP rules.</p>	<p>When reviewing a title V permit that contains a condition that allows excess emissions,</p> <ul style="list-style-type: none"> Verify that any provisions for excess emissions are consistent with a federally promulgated standard or a standard that has been approved by EPA. If so, it is acceptable to include these in the permit. If inconsistent with federal rules, <u>the excess emissions language must be removed.</u>
<p>Proper Identification of Federally Enforceable Permit Terms</p> <p>Any term defined as an applicable requirement in §70.2 should be identified as federally enforceable (state and local rules may have been included in the definition of applicable requirement in the state/local program).</p>	<p>Sometimes federally enforceable permit terms are misidentified as being enforceable by the State only. See also discussion of State only requirements in the Applicable Requirements section.</p>	<p>When reviewing a provision identified as State-only</p> <ul style="list-style-type: none"> Make sure that the provision does not originate in a federally-enforceable applicable requirement. See also section on NSR/PSD applicable requirements for more information.

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
<p>“Normally”</p> <p>as in</p> <p>“The permittee shall normally inspect the unit daily.”</p>	<p>The term “normally” is subject to interpretation. Is a permittee still “normally” inspecting on a daily basis if inspections take place only 5 days out of 7? This language may place a burden on the permitting authority to show that the source's failure to inspect daily violated the requirement to “normally” inspect the unit daily.</p>	<p>Require that specific language be substituted for ambiguous language.</p> <p>Example: “The permittee shall inspect the unit daily.”</p> <p>If necessary to allow for missed inspections, the permit could include a data recovery provision.</p>
<p>“as soon as possible; promptly”</p> <p>as in</p> <p>“The permittee shall take corrective action as soon as possible.”</p>	<p>“As soon as possible” and “promptly” are open-ended. Without an outer limit defined in the permit, the burden may be on the permitting authority to prove that the source could or should have acted sooner.</p>	<p>Require that an outer time limit be set on any actions required to occur “as soon as possible” or “promptly.”</p> <p>Example: The permittee shall take corrective action as soon as possible but no later than within 24 hours.</p>
<p>“Significant”</p> <p>as in</p> <p>“The permittee shall take corrective action if parameters are significantly out of range.”</p>	<p>“Significant” must be defined for the permit to be enforceable. Otherwise, the burden may be on the permitting authority to show that a problem is significant.</p>	<p>Specify parameter levels or ranges which will trigger action.</p> <p>For example:</p> <p>“The permittee shall take corrective action if parameters are more than 10% out of the range defined in condition xx.”</p> <p>Or</p> <p>“The permittee shall take corrective action if pressure drop is less than 15 inches for more than one hour.”</p>

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
<p>“Should” or “may”</p> <p>as in</p> <p>“The permittee should inspect daily. The permittee may test monthly.”</p>	<p>“Should” indicates a preference, rather than a requirement, and is not appropriate for permit conditions unless the underlying applicable requirement contains provisions that are not mandatory but are recommendations only.</p> <p>“May” indicates an option, rather than a requirement, and is not appropriate for permit conditions.</p>	<p>Require that all required permit terms use “shall” or “must.”</p> <p>For example: “The permittee must inspect daily.” or “The permittee shall test monthly.”</p>
<p>“As suggested by the manufacturer’s specifications”</p> <p>as in</p> <p>“The permittee shall maintain pressure drop as suggested by the manufacturer’s specifications.”</p>	<p>It is acceptable to use the manufacturer’s recommendations as the basis for the numbers that go into the permit if there is no better data. However, the specific numbers must be incorporated into the permit rather than a reference to a document which may not include clear requirements.</p>	<p>Require that the specific numbers (which may be based on the manufacturer’s recommendations) be included in the permit term.</p> <p>For example: “The permittee shall maintain pressure drop greater than 15 inches.”</p>
<p>“Take reasonable precautions”</p> <p>as in</p> <p>“The permittee shall take reasonable precautions to reduce fugitive emissions.”</p>	<p>“Reasonable precautions” may be too subjective to be practically enforceable. The permit must identify the minimum activities that constitute “reasonable precautions”.</p>	<p>Require the permit to include the specific measures that must be taken.</p> <p>For example, “The permittee shall conduct monthly audits of the facility to assure that the minimum reasonable precautions for preventing fugitive emissions are implemented and shall maintain records in accordance with condition xx. For the purposes of this condition, reasonable precautions shall include but are not limited to the following:</p> <ul style="list-style-type: none"> a. Storing and mixing volatile materials in covered containers; b. Storing all solvents or solvent containing cloth or other material used for surface preparation in closed containers;... <p>...[other specific conditions].”</p>

Language That May Indicate Practical Enforceability Problems....

Problem Language	Discussion	Correction
<p>“Use best engineering practices”</p> <p>as in</p> <p>“The permittee shall use best engineering practices to operate and maintain the boiler.”</p>	<p>This is the same issue as “reasonable precautions”. To be practically enforceable, “best engineering practices” must be defined/specified in the permit.</p>	<p>Require that the engineering practices be specified in the permit.</p> <p>For example: “The permittee shall use best engineering practices to operate and maintain the boiler which shall include but not be limited to servicing the boilers at least once each calendar year to assure proper combustion is occurring and that the units are in proper operating condition.”</p>

Conditions that Limit the Use of Credible Evidence

Since the publication of the Credible Evidence Rule on February 24, 1997 (62 FR 8314), and the Compliance Assurance Monitoring Rule on October 22, 1997 (62 FR 54899), EPA has become sensitive to language that could be construed to limit use of credible evidence. Data that is comparable to information generated by a reference method test (for example, CEMS data) could be considered credible evidence. Because any data comparable to the reference test method is credible, permit language limiting the type of data that can be used to establish compliance or a violation is unacceptable. Examples of **unacceptable language** include:

- “Compliance with the emissions limit shall be determined (or demonstrated) by test method X.”
- “The permittee shall be deemed in compliance with the emissions limit if the results of an emissions test done in accordance with test method X are less than Y.”

Other examples of unacceptable language are included in the following table.

It is beyond the authority of the permit writer to limit what evidence may be used to prove violations. (See 62 FR 54907-8, October 22, 1997) A permit may not be written in such a manner that it would interfere with the use of credible evidence.

When reviewing title V permit conditions that relate to determining compliance,

- Look for, and require the elimination of, any language that would bar the use of credible evidence.
- If the unacceptable language originates in an applicable requirement, flag the requirement for the permitting authority as one that must be addressed to allow for the use of credible evidence in their response to the 1994 credible evidence SIP call, which is still in effect.

Credible Evidence “Busting” Language that must be Deleted

Does the Permit Contain...	CE “Busting” Language to Look For
<i>Language that specifies only certain types of data can be used to determine compliance?</i>	<ul style="list-style-type: none"> • “The monitoring methods specified in this permit are the sole methods by which compliance with the associated limit is determined.” • "Monitoring and reporting requirements are requirements that the permittee uses to determine compliance...." • "Compliance with this provision will be demonstrated by(insert periodic monitoring provisions) ..."

Credible Evidence “Busting” Language that must be Deleted

Does the Permit Contain...	CE “Busting” Language to Look For
<i>Language that specifies certain types of data are more credible than others?</i>	<ul style="list-style-type: none"> • “Reference test method results supersede parametric monitoring data.” • “The EPA Reference Test Method results supersede CEMS data.”
<i>Language that excuses violations under certain conditions?</i>	<ul style="list-style-type: none"> • “The permittee is considered to be in compliance if less than 5% of any CEMS monitored emission limit averaging periods exceeds the associated emission limit.” • “If the permitting authority does not take action on an excess emissions demonstration by responding to the permittee in writing within 90 days of receipt, the permitting authority will be deemed to have made a determination that the excess emissions were unavoidable.” • “Excess emissions that are unavoidable are not violations of permit terms.” • “A ‘deviation from permit requirements’ shall not include any incidents whose duration is less than 24 hours from the time of discovery by the permittee.”

The Following Information Appears in Appendix D :

- Credible Evidence Rule
- Memo on Start-up, Shut-down, Maintenance and Malfunctions
- Memo on Limiting Potential to Emit

Guidelines:

Permit Shield

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III-56

What is a Permit Shield?

A permit shield is specific permit language that, if properly written, can protect the source from enforcement of an applicable requirement under two circumstances:

- 1) A requirement applies to the source and a title V permit condition explicitly includes the requirement, (including through a streamlined permit condition) OR
- 2) A requirement does not apply to the source and the title V permit includes a demonstration of why the requirement does not apply.

The permit shield protects sources only from enforcement of violations that happen at the time the shield is in place.

A source may request the permitting authority to include a permit shield in the title V permit under 504(f) of the CAA, and §70.6(f).

Why Review Permit Shields?

Review all permit shields carefully because of the implications for enforcement.

- *If there is no shield* in the title V permit for an applicable requirement, an enforcement action may be brought against the source for violation of both the rule or permit containing the applicable requirement and the title V permit itself.
- *If there is a shield* in the title V permit for an applicable requirement, an enforcement action may ONLY be brought against the source for a violation of the title V permit.

Shields can pose enforcement problems. For example, a permit might shield a requirement that is wholly or partially missing from the permit, or state incorrectly that an applicable requirement does not apply. A poorly crafted permit shield may create enforcement problems, until EPA or the permitting authority reopens and corrects the permit.

Shields can be beneficial. The benefit of a well-crafted permit shield is that it clarifies which requirements apply to a source and allows streamlining of overlapping requirements to take place. For requirements that apply to a source, a well-crafted shield does not pose a problem if the requirement is fully included in the title V permit, because violations may still be enforced through the title V permit. For requirements that do not apply to a source, a well-crafted shield does not pose a problem because there is no potential for a source to violate a non-applicable requirement.

See Streamlining Guidelines for information on the role of permit shields in streamlining.

How Do I Review a Permit Shield?

Review each permit shield to make sure it does not exempt the source from a requirement to which the source is subject or to which the source may become subject in the future. Your review differs depending on the purpose of the shield.

When reviewing a title V permit that contains a shield for applicable requirements that are included in the permit,

- Compare the language in the applicable requirement to the title V permit condition to verify the permit language accurately and fully captures the applicable requirement and that the title V permit condition is identified as being federally-enforceable.

Once this has been confirmed, make sure the shield

- Applies only to requirements and units captured in the permit.
- Identifies the version of the applicable requirement that is being shielded.
- Applies only to the requirements and units eligible for a shield.

Example Permit Shield for an Applicable Requirement

If the Applicable Requirement Reads...	And the Title V Permit Reads...	Then the Permit Shield May Read...
SIP Rule 300 Section 3: Each unit must meet an emission limit of 5 lbs of SO ₂ per hour averaged over a three-hour period.	Unit 1 must emit no more than 5 lbs SO ₂ per hour averaged over a three-hour period. (SIP Rule 300 Section 3, Adopted 8/14/94)	For Unit 1, compliance with the conditions of this permit shall be assumed to be compliance with SIP Rule 300, section 300.3.

When reviewing a title V permit that contains a shield for requirements that are shielded because they do not apply to the source,

- Review the permit conditions to assure the source could not trigger the requirement at a later date.

After this has been confirmed, make sure the shield

- Lists explicitly the requirements that are not applicable.
- Includes an explanation of why the requirement does not apply.
- Identifies the version of the applicable requirement being shielded.
- Applies only to requirements and units eligible for a shield.

Example Permit Shield for Non-Applicable Requirement

If the Statement of Basis Reads....	And the Title V Permit Reads....	Then the Permit Shield May Read....
NSPS subpart CC only applies to sources using arsenic as a raw material in the glass manufacturing process. The source does not use arsenic, and a permit condition has been added to the permit to prohibit use of arsenic.	The permittee shall not use arsenic as a raw material or as a component of a raw material in any glass manufacturing process.	New Source Performance Standard Subpart CC has been determined not to apply to this facility. (The NSPS applies only to sources using arsenic).

Tips for Review Of Shields Covering Applicable Requirements

Issue/Example	Explanation	Correction
<p><u>Permit fails to capture all shielded requirements:</u></p> <p>For example, a permit contains a shield for a SIP rule. When comparing the SIP rule to the title V permit conditions, you see the emission limits have been included in the permit, but the applicable recordkeeping and testing requirements have not been incorporated.</p> <p>Or</p> <p>A permit contains a shield for a PSD emission limit. When comparing the PSD permit to the title V permit conditions, you see the title V permit does not contain the averaging time from the PSD permit.</p>	<p>§70.6(f)(1)(I) allows applicable requirements to be shielded if the applicable requirement is included and is specifically identified in the title V permit. The shield makes requirements enforceable only through the title V permit.</p> <p>A permit shield may not be provided for a given rule or portion of a rule unless the shielded requirement is fully captured by a permit condition (or is explicitly deemed not applicable). If a permit condition is written that addresses a rule's emissions limit but not its recordkeeping requirements, a shield for that rule may create enforcement problems regarding the source's obligation to comply with the recordkeeping requirements of the rule. Because granting a shield may create enforcement problems, it is extremely important that the permit condition fully and accurately capture the requirements of the shielded rule.</p>	<p>Require inclusion of permit conditions that fully capture missing applicable requirements or components thereof such as:</p> <ul style="list-style-type: none"> emission limits averaging times monitoring recordkeeping reporting testing

Tips for Review Of Shields Covering Applicable Requirements

Issue/Example	Explanation	Correction
<p><u>Permit shield applies to requirements not included in the permit (shield is too broad):</u></p> <p>For example, a shield that reads: “Compliance with the permit conditions shall be considered compliance with ALL applicable requirements.”</p> <p>Or</p> <p>“Compliance with the permit conditions shall be considered compliance with 40 CFR 60.”</p>	<p>§70.6(f)(1)(I) allows permit shields only for requirements that are “included and specifically identified in the permit.”</p> <p>There are practical reasons for part 70's requirement to make shields specific. Lack of specificity increases the possibility of creating a shield for a requirement that is wholly or partially missing from the permit. Specific shield language makes it possible to confirm that all shielded requirements are fully captured in the permit.</p>	<p>Prevent unintentional shielding of applicable requirements that are not specifically included in the permit by requiring broad permit shield language to be re-written.</p> <p>Require that the shield identify the rules, permits, or sections thereof that are addressed in the permit.</p> <p>If only certain units are eligible for the shield, make sure that these units are identified in the shield.</p> <p>For example, if the permit contains all the applicable requirements from SIP rules A and B, require the shield be revised to read: “Compliance with the permit conditions shall be considered compliance with SIP Rules A and B.”</p>
<p><u>Compliance with the shielded requirement cannot be determined based on currently available information:</u></p> <p>For example, the permit provides a shield for an applicable requirement, where the applicable requirement requires the source to develop a source-specific plan, for example, a CAM plan under the CAM rule or an O&M plan under a SIP rule.</p>	<p>Where a plan has not yet been developed and incorporated into the title V permit, compliance with the plan cannot be assured through the title V permit. If these plans are not incorporated into the permit at time of permit issuance, then the plans have not been reviewed by the permitting authority, public or EPA to determine whether the plans comply with the applicable requirements. Therefore, a shield must not be extended to this requirement.</p> <p>In general, a shield cannot be extended to future obligations that cannot be defined as they apply to specific units at the time of permit issuance.</p>	<p>A permit shield should not be extended to requirements such as these because a source that has developed an insufficient plan could be shielded from the requirement to develop an adequate plan.</p> <p>Make sure that a shield is not extended to this applicable requirement unless the permit incorporates the plan and the plan has already gone through the review required by the applicable rule or permit.</p>

Tips for Review Of Shields Covering Non-Applicable Requirements

Issue/Example	Explanation	Correction
<p><u>Shielded requirement is potentially applicable:</u></p> <p>For example, a shield may state that 40 CFR 60 subpart CC is not applicable because the source does not use arsenic in its process and CC applies only if arsenic is used. However, your review shows that there is nothing in the permit or relating to the source's operations that prevents the source from using arsenic in the future.</p> <p>Or</p> <p>The shield states that 40 CFR 60 subpart CC does not apply because the unit was constructed before the subpart's effective date, and the unit has not since been modified. However, your review shows that there is nothing from preventing this subpart from becoming effective if the source modifies in the future.</p>	<p>Some requirements clearly do not apply to a source and could not be triggered in the future. However, some requirements do not apply because of the way a unit is currently operated. If the permit allows the source the flexibility to change its operations, then it is possible that a non-applicable requirement could become applicable at that time. This may happen if the unit modifies (NSPS may be triggered when units modify) or if a unit uses different fuels or raw materials.</p> <p>If a requirement that is shielded may become applicable in the future, this creates a problem. In this situation, the source would be shielded from enforcement of that requirement until the permit was reopened to remove the shield.</p>	<p>The statement of basis or other supporting documentation must provide enough information to justify this applicability determination. For example, NSPS applicability is often based on maximum capacity of the process unit and the date of construction or modification of the process unit. To justify that an NSPS does not apply, the statement of basis would need to show that a unit's maximum capacity is below the applicability threshold, or that no modification (as defined in §60.14) or reconstruction (as defined in §60.15) has occurred since the effective date of the NSPS.</p> <p>Where the requirement is not applicable because of the construction date, the permit shield may be revised in a way that either</p> <ul style="list-style-type: none"> • the source is prohibited from modifying or • the shield becomes void if the unit is modified. <p>Where the requirement is not applicable because the source does operate in a certain way, either</p> <ul style="list-style-type: none"> • the permit must prohibit the source from operating in a way that would trigger the requirement, or • the shield must be modified to include a statement that the shield is void if the source operates in a way that would trigger the requirement.

Tips for Review Of Shields Covering Non-Applicable Requirements

Issue/Example	Explanation	Correction
<p><u>Permit shield does not contain a demonstration or a concise summary thereof:</u></p>	<p>§70.6(f)(1)(ii) states that where a shield specifically determines that a requirement is not applicable, the permitting authority must make this determination in writing, and the permit must include the determination or a concise summary thereof.</p>	<p>The permit shield must be amended to include the determination of non-applicability:</p>
<p>For example, a permit's statement of basis explains that 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants) is not applicable to a permitted stockpile, because under 40 CFR Subpart 60.671, transfers to stockpiles are specifically exempted from Subpart OOO. However, the permit shield states only that Subpart OOO does not apply to this stockpile.</p>		<p>“The following requirement is not applicable to [a specific source or emissions unit] because [summary of reason from statement of basis].”</p>

Tips for Review of All Shields

<u>Issue/Example</u>	<u>Explanation</u>	<u>Correction</u>
<p><u>Permit shield fails to identify version of shielded requirement:</u></p> <p>For example, a shield is included in a title V permit for “SIP Rule 100.” At a later date, a new more stringent version of SIP Rule 100 is approved into the SIP. Until the title V permit is reopened to include the new rule, it does not assure compliance with SIP Rule 100. However, because the shield language applies to “SIP Rule 100,” it could be read to apply to the new applicable requirement.</p>	<p>Title V permits can generally only be written to assure compliance with requirements in existence at the time of permit issuance. Different versions of one rule often exist. Federal and State rules often change while retaining the same name and numbering. The result of permit shield language that does not specify the version of the shielded requirement may be that compliance with the title V permit no longer assures compliance with current version of the applicable requirement.</p>	<p>Make sure that the shield applies only to requirements considered in drafting the permit.</p> <p>To achieve this, the version of the rules that are included in the permit shield must be identified. There are at least three ways to do this:</p> <ul style="list-style-type: none"> ! The adoption or approval date of the rule may be cited in the origin and authority of the individual permit conditions, ! The adoption or approval date of the rule may be cited in the permit shield itself, or ! The shield may state that the versions of the rules that are in the SIP (or are otherwise identified as federally-enforceable) as of the effective date of the permit are shielded.

Tips for Review of All Shields

<u>Issue/Example</u>	<u>Explanation</u>	<u>Correction</u>
<p><u>Permit shields source from past or potential future case-by-case analysis requirements:</u></p> <p>For example, a permit shield states that compliance with the permit assures compliance with all past and/or future NSR requirements.</p>	<p>Rules such as construction permit rules must be applied on a case-by-case basis to each construction or modification. It is difficult, without a detailed history of the source, to determine whether any particular unit can be shielded from past requirements. Since shields are only intended to cover “compliance with any applicable requirements as of the date of permit issuance...” (see §70.6(f)), the permit cannot “assure compliance” with these rules for such future actions. As a practical matter, it would generally not be possible to anticipate the case-by-case requirements that would apply to future changes at a source, therefore the permit could not assure compliance with these requirements. Thus, rules requiring case-by-case analysis can not generally be covered by a shield.</p>	<p>For shields that apply to past requirements, determine whether there is a detailed demonstration provided for each unit covered by the shield showing either that compliance is assured by the permit or that based on the unit’s history since construction, a determination of non-applicability can be made. If an adequate demonstration cannot be provided, a shield from past requirements cannot be extended to a unit.</p> <p>Require that any shields that apply to future requirements be removed from the permit unless all of the future requirements are known and the permit either assures compliance with, or contains conditions assuring non-applicability of, the requirement.</p>

Tips for Review of All Shields

<u>Issue/Example</u>	<u>Explanation</u>	<u>Correction</u>
<p><u>Shield covers ineligible requirement:</u></p> <p>For example, a shield covering the requirements of the state or local part 70 rule.</p>	<p>Most applicable requirements, as defined in a permitting authority's title V program, are eligible to be covered by a permit shield. However, there are certain applicable requirements that part 70 states may not be covered by a permit shield. Also, the §70.6(g) language on permit shields specifically states that the shield language is "compliance with the conditions of the permit shall be deemed compliance with any applicable requirements..." This indicates that only applicable requirements may be shielded. Because part 70 requirements are not "applicable requirements" (See definition of applicable requirement in §70.2), part 70 requirements may not be shielded.</p> <p>For more information on what requirement can and can't be shielded, see the following table.</p>	<p>Make sure that any requirements that are shielded are eligible for a shield (see table below for assistance). If an ineligible requirement is shielded, the shield language must be removed from the permit.</p>

What MAY Be Covered by a Shield?	What CAN'T Be Covered by a Shield?
<ul style="list-style-type: none"> ▶ Most applicable requirements, as defined in permitting authority's title V program 	<p>The following CAA requirements:</p> <ul style="list-style-type: none"> ▶ Section 303 (Emergency orders) ▶ Title IV (Acid rain requirements) ▶ Section 114. (Enforcement provisions. See §70.6(f)(3)) ▶ Part 70 requirements and the related State or local rule requirements. This is because the permit shield may only apply to applicable requirements. Part 70 requirements are not applicable requirements.
<ul style="list-style-type: none"> ▶ Emission caps allowed under §70.4(b)(12)(iii). 	<ul style="list-style-type: none"> ▶ Emission trading provided for under a SIP-approved rule. For more information, see §70.4(b)(12)(ii) and §70.4(b)(12)(ii)(B)

What MAY Be Covered by a Shield?	What CAN'T Be Covered by a Shield?
<ul style="list-style-type: none"> ▶ Administrative amendments incorporating preconstruction review permit requirements issued under a SIP-approved program that substantively meets the requirements of §§70.6, 70.7, and 70.8. ▶ Significant permit modifications. 	<ul style="list-style-type: none"> ▶ Minor permit modifications. See §70.7(e)(2)(vi) ▶ Section 502(b)(10) changes. Section 502(b)(10) of the Act allows sources to make changes to their permit which may contravene existing permit conditions. For more explanation, see §70.4(b)(12)(I)(B) and preamble pages 57 FR 32266-32269. ▶ Off-permit changes. Part 70 allows sources to make certain changes “off-permit” (without going through a permit revision) if the change is not addressed or prohibited by the permit. For more explanation, see §70.4(b)(14)(iii) and preamble pages 57 FR 32269-32270.
	<ul style="list-style-type: none"> ▶ Past noncompliance. See §70.6(f)(3)(ii).

Other Permit Shield Topics

Must a Permit Shield be Included for Streamlined Permit Conditions?

Permit shields are recommended for permits with streamlined applicable requirements described in WP2. SEE Guidelines on Streamlining and WP2 pages 8, 14 (step 6) 16, and 19.

What’s the Difference between an Application Shield and a Permit Shield?

Permit shields should not be confused with the “application shield,” which is granted a source if it submits a permit application that meets the requirements for submitting a timely and complete application under §70.5(a)(2) and §70.7(b) (See also §503(d)). The application shield allows a source to operate without a title V permit.

Guidelines:

Streamlining

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What is Streamlining?

Streamlining is the process of evaluating multiple overlapping requirements on an emission unit to come up with one set of requirements to be placed in the title V permit that will assure compliance with all the overlapping requirements. The basic concept behind streamlining is that, as long as the permit contains the most stringent of the overlapping requirements, the permit will assure compliance with overlapping requirements.

For example, an emissions unit could be subject to a NSPS and a SIP rule that result in two different emissions limits for the same pollutant, and two source monitoring requirements for instrumentation, recordkeeping, and reporting. If the permitting authority and source agree to streamline these two requirements, the permit would contain:

- the most stringent emission limit
- the monitoring that best assures compliance
- the recordkeeping and reporting associated with the chosen monitoring
- a demonstration of the streamlining in the statement of basis

Streamlining is not specifically mentioned in the Clean Air Act or Part 70. However, CAA 504(a) and Part 70.6(a)(1) both imply that streamlining is allowed since they only require that the permit include terms and conditions that “assure compliance with all applicable requirements.” Pages 6-19 of White Paper # 2 contain extensive guidance on streamlining.

Why Review Streamlining?

Done incorrectly, streamlining could result in a permit that does not include (i.e. assure compliance with) all applicable requirements. Errors can easily occur if the emissions limits being streamlined are given in different units (e.g., ppm vs. lbs/hr), or in streamlining lengthy requirements where monitoring, recordkeeping, and reporting requirements may be “buried” in the regulation and are easy to miss.

Tips for Review of Streamlining

Does the Permit...	What to Look For
<p>...contain the most stringent emission limit?</p> <p><i>NOTE: The key question to ask yourself here is: Could the source possibly violate any of the subsumed requirements while still complying with the streamlined permit condition?</i></p> <p><i>If the answer is “yes”, the streamlining must either be corrected to make the answer “no”, or the overlapping requirements cannot be streamlined and must each be included as separate permit conditions. See example at end of streamlining guidelines.</i></p>	<p>The emission limit contained in the permit must assure compliance with any subsumed applicable requirements.</p> <p>Make sure the shortest averaging time of the streamlined requirements is included in the permit.</p> <p>If no one limit is unambiguously more stringent than the others, the conditions of overlapping applicable requirements can be synthesized into a single new permit term, provided the new term will assure compliance with all requirements. For example, a 20% opacity (10 min. average) and a 40 % opacity (1 min. average) would result in a streamlined limit of 20% opacity (1 minute) average. Note that the applicant and permitting authority must agree on any streamlining that is to be included in the permit, especially since, as in this example, the streamlining may result in a more stringent emission limit.</p> <p>Watch out for emission limits given in different units.</p> <p>It is generally feasible to streamline limits given in the same form, such as mass emissions rate, outlet concentration, or fuel content limit.</p> <p>It is generally not feasible to streamline limits given in different forms. An exception may be made if additional limits are added to the permit to capture any assumptions made in the conversion calculations. For example, subsuming a limit on mass SO₂/hour into a fuel sulfur content limit would require adding an additional, enforceable limit to the permit on the fuel usage rate assumed in the calculations.</p>
<p>...contain the monitoring that best assures compliance?</p>	<p>The permit must contain the “most assuring” monitoring. Note that this may not always be the monitoring associated with the most stringent emission selected for inclusion in the permit. For example, if you streamline a 20% opacity limit that requires an annual source test with a 40% opacity limit that requires a COM, the streamlined permit condition must contain a 20% opacity with a COM. In all cases, make sure that the monitoring selected is relevant to and technically feasible for the streamlined limit.</p> <p>For streamlined limits based on alternative or new test methods other than those already approved by EPA for the SIP or a section 111 or 112 standard, see Attachment A of White Paper #2 for additional steps to complete the proposed streamlining.</p>

Does the Permit...	What to Look For
...include the recordkeeping and reporting associated with the chosen monitoring?	<p>Generally the recordkeeping and reporting that should be placed in the permit will be that associated with the chosen monitoring.</p> <p>Where recordkeeping is the only monitoring, apply the “most assuring” test to the recordkeeping provisions to determine which to include in the permit.</p> <p>Watch out for streamlining involving lengthy requirements, such as NSPS or MACT standards. These standards may contain monitoring, recordkeeping, and reporting requirements that are “buried” in the regulation and are easy to miss.</p>
...include an adequate streamlining demonstration in the statement of basis accompanying the permit?	<p>If a source and permitting authority agree to streamline overlapping requirements, the statement of basis must contain a side-by-side comparison of the various requirements that demonstrates which is most stringent. The party (source or permitting authority) that initiated the streamlining should be the primary preparer of such a demonstration. Any demonstration by the source should be supplemented by the permitting authority, as necessary, to provide clarity, and should be included in the statement of basis for the permit that is part of the public record.</p> <p>Verify calculations as necessary, and check to be sure any assumptions made in conversion calculations (e.g. fuel consumption rate) are included as enforceable permit conditions.</p> <p>Check that the demonstration includes the selection of the “most assuring” monitoring where any questions could arise.</p>
...contain a permit shield to cover streamlined requirements?	<p>While a permit shield is not required to accompany streamlining, the full benefits of streamlining are not realized unless all streamlined requirements are included in a permit shield.</p> <p>Benefit of clarification of overlapping requirements: Streamlining clarifies for the source what they need to do. This benefit is achieved without a permit shield.</p> <p>Benefit of being deemed in compliance with overlapping requirements: A source may only be deemed in compliance with the streamlined requirements if the requirements are included in a proper permit shield.</p>
...include either a citation to all subsumed requirements.	<p>Streamlined requirements in a permit should be identified as such in the permit to assure the streamlining demonstration is reassessed in the event the streamlined condition is amended. Ideally, a permit term should be identified as streamlined through the inclusion of a citation to each streamlined requirement.</p>

Does the Permit...	What to Look For
...mark as federally enforceable any previously “state-only” requirements which subsume federally enforceable requirements?	If a federally enforceable requirement is subsumed into another requirement through streamlining, the streamlined requirement in the permit must be federally enforceable. Refer to page 11 of White Paper #2 and the guidelines section on federal enforceability for more information.
... violate 40 CFR 72.70(b) and 40 CFR 70.6(a)(1)(ii) by allowing title IV (Acid Rain) requirements to be subsumed into other applicable requirements?	<p>Acid rain requirements (under Part 72 and 78) must be included in the title V permit and thus may not be subsumed into other more stringent applicable requirements.</p> <p>However, note that acid rain requirements included in permit may be used in a streamlining demonstration to assure compliance with other overlapping (equally or less stringent) applicable requirements. Such a streamlining exercise cannot affect in any way the acid rain standards required to be in the permit, including emission limits, monitoring, recordkeeping, reporting, and testing.</p>

Improper Use of Streamlining

“Streamlining Away” Requirements: The purpose of streamlining is to eliminate redundancy of overlapping requirements, not pick and choose which requirements are really “important” for a source to follow. Thus, streamlining demonstrations cannot be used to explain away requirements.

For example, if a source is subject to a limit on opacity but the source is limited by its permit to burning only pipeline quality natural gas, the likelihood of violating the opacity limit may be very low. However, the opacity limit cannot be “streamlined away” (taken out of the permit). Instead, one simple way to deal with this situation is to include the opacity limit in the permit, but to impose periodic monitoring requirements (in accordance with the guidelines section on periodic monitoring) that reflect the very low likelihood of violation.

Example of a Proper Streamlining Demonstration

Synthesizing a New Permit Term: Following is an example of a proper streamlining demonstration included in the statement of basis for the streamlining of four overlapping applicable reporting requirements. Since no single reporting requirement would assure compliance with the others, all four reporting requirements were synthesized into a new permit term which assures compliance with all four applicable requirements. Note the details of each applicable requirement are given clearly for a side-by-side comparison:

Overlapping requirements to be streamlined:

Rule 446, the NSPS (Subpart Kb), and NSR permit condition #5 require the following records be kept:

Rule 446: Liquids stored, true vapor pressure ranges, actual storage temperature

NSPS: Volatile organic liquid stored, period of storage, and max true vapor pressure of stored liquid for at least two years

Condition #5: Types, quantities (gallons/day), true vapor pressure ranges, and actual storage temperature for at least one year.

Rule 207 (district's title V rule) requires that all monitoring data and support information be kept by the source for a period of at least 5 years.

All these requirements are currently federally enforceable, and the new streamlined requirement will be marked as federally enforceable.

Proposed streamlined condition to be included in the permit:

STREAMLINED RECORDKEEPING REQUIREMENT: [Rule 446, NSPS Subpart Kb, NSR #5]

The permittee shall keep copies of the following records. (FEDERALLY ENFORCEABLE)

- A. Type of liquid stored
- B. Maximum true vapor pressure of the liquid stored
- C. Actual storage temperature (measured monthly)
- D. Period of storage
- E. Quantities of liquid stored (gallons/day)

The records shall be continuously maintained for the most recent five year period and shall be made available to the Air Pollution Control Officer upon request.

Example of Two Limits That May Not Be Streamlined

Emission limits which are not (quite) overlapping: The following example shows the process of comparing two opacity limits that, at first blush, appear to be overlapping. However, as shown below, the averaging times for the standard are written in different ways such that neither standard would assure compliance with the other. Thus, the two limits cannot be streamlined and both standards must be listed separately in the permit.

SIP Rule Opacity Standard	PSD Permit Opacity Standard
Limit: not to exceed 10% opacity for a period or periods aggregating more than 3 minutes in any one hour (Note these 3 minutes do not have to be <u>consecutive</u>)	Limit: not to exceed 10% opacity averaged over any 6-minute period

From the first “Tip” above on reviewing streamlining, the key question to ask yourself is, **“Could the source possibly violate any of the subsumed requirements while still complying with the streamlined permit condition?”** If the answer is “yes”, then the two conditions cannot be streamlined into one and must each be included as separate permit conditions.

Select the requirement that appears to be more stringent to “test” it as the streamlined permit condition (or when reviewing a permit, see which requirement was included in the permit as the streamlined permit condition to test). Your first inclination when looking at these two permit conditions is that the limit associated with the shorter time frame of 3 minutes is more stringent because it allows less averaging of emissions. Thus, you would guess the SIP Rule should be the streamlined permit condition.

Ask yourself the key question: “Could the source possibly violate the PSD limit (6 minute average) while still complying with the SIP rule (any 3 minutes)?

To answer the question, first create a hypothetical situation: Suppose the source had two minutes in a row of 50% opacity, followed by 5% opacity for the rest of the hour.

Second, verify the hypothetical situation does not violate the streamlined permit condition: The streamlined permit condition is the SIP Rule. There are no 3 minutes in the hour where the source exceeded 10 % opacity. (The source only exceeded 10% opacity in 2 minutes.)

Third, ask if the hypothetical situation violates the subsumed requirement: The subsumed requirement is the PSD limit. If you take a 6 minute average including the two 50% readings you get:

$$(50+50+5+5+5+5)/6 = 20 \% \text{ opacity}$$

This result exceeds the 6-minute limit in the PSD permit. The answer to the question is: **Yes, the source could exceed the PSD limit while still complying with the SIP rule. Therefore these two conditions cannot be streamlined and must be included as separate permit conditions.**

Guidelines

Periodic Monitoring

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What is Periodic Monitoring?

Monitoring is a broad term that describes a source's ongoing activities to determine how it is operating in relation to its emission limitations and standards. Monitoring includes activities such as:

- Continuous Emission Monitoring Systems (CEMS)
- Continuous Opacity Monitoring Systems (COMS)
- Parametric Emissions Monitoring (PEMS)
- Parametric Monitoring (continuous or at specified intervals)
- Periodic Source Testing
- Recordkeeping

Periodic Monitoring, a term used in Part 70, describes the combination of monitoring required by the applicable requirements and monitoring created in the title V permit as necessary to meet the CAA requirement that the permit assure compliance with the applicable requirements.

Periodic monitoring is required by the CAA and part 70 because some applicable requirements do not contain adequate provisions for determining whether a source is in compliance with its emissions limitations. For example,

- An applicable requirement may specify that a source must operate an incinerator at a certain temperature, but does not include temperature monitoring and recordkeeping. Periodic monitoring would be added to the title V permit so that the source could assure it is complying with this requirement.
- Many NSPS only require that sources conduct an initial source test to determine whether they are capable of meeting the applicable requirement, but do not require additional monitoring. Periodic monitoring would be added to the title V permit so that the source could show compliance on a continuing basis.

In addition to the requirement for enhanced monitoring, CAA Section 504 requires that permits contain "conditions as are necessary to assure compliance." This CAA requirement is reflected in §70.6(a)(3), which requires "monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance" and §70.6(c)(1), which requires all part 70 permits to contain "testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit."

Why Review Periodic Monitoring?

Significant benefits of title V include compliance assurance and public access to data. Periodic monitoring provides data sources can use to promptly identify and correct compliance problems and to certify compliance; the data is also reported to the permitting authority and available to the public. Periodic monitoring provides information and compliance tools to the public that may not otherwise always be available under state law.

EPA has not mandated specific monitoring or protocols for developing monitoring to meet the above requirements. Periodic monitoring determinations are therefore made on a case-by-case basis. Because of the case-by-case nature of periodic monitoring determinations, it is important that permits be reviewed to make sure that periodic monitoring is included and that the determinations are made consistent with part 70 requirements.

Tips for Permit Review

Review each applicable requirement emission limit or standard and determine what monitoring, recordkeeping and reporting (MRR) is associated with the emission limit. Note that periodic monitoring is only required if there is an applicable emission limit or standard. Periodic monitoring is not generally required for State-only requirements (see Applicable Requirements section for more information on State-only requirements.)

The term *emission limit* includes mass, rate and concentration limits, technology requirements, percent reduction requirements, work practice standards, process or control device parameters, and design, operational, or maintenance requirements. See the definition of “emission limitation or standard” in

Guidelines: Periodic Monitoring

If there is MRR associated with the emission limit,

- Determine whether the monitoring yields reliable data from the relevant time period that are representative of the source's compliance, and will assure compliance with the emissions limit.

Types of Monitoring Presumed to be Adequate	Types of Monitoring NOT Presumed to be Adequate
<ul style="list-style-type: none">• Continuous compliance determination methods such as CEMS, COMS, and in some cases, recordkeeping.• Monitoring in NSPS and NESHAP standards proposed after 1990• Acid Rain monitoring requirements• CAM monitoring	<ul style="list-style-type: none">• Monitoring in pre-'90 NSPS and NESHAP standards• Monitoring in SIP rules• Monitoring in construction permits, including PSD and NSR permits

These presumptions are explained in the September 15, 1999 memorandum from Eric Schaeffer and John Seitz entitled "Periodic Monitoring Guidance for Title V Operating Permits Programs." In addition, for California, the June 24, 1999 "CAPCOA/CARB/EPA Region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP" (see Appendix E) were developed for specific source categories and emission limits.

- If the MRR is not presumptively acceptable, it may still be acceptable. Review the monitoring and the permitting authority's explanation of monitoring in the Statement of Basis to evaluate whether it assures compliance. Consider:
 - ▶ Will the monitoring method yield reliable data with respect to the emission limit?
 - ▶ Will the monitoring method provide data that can be related to the relevant time period over which compliance with the emission limit is determined?
 - ▶ Will the monitoring data be collected at a frequency that will provide information that is representative of the source's compliance with the permit?
 - ▶ Is the monitoring condition written in a way that is practically enforceable? To be practically enforceable, the monitoring must include recordkeeping requirements, and be written in an unambiguous way (see Practical Enforceability Guidelines).

EPA has not mandated specific monitoring or protocols for developing monitoring to meet the above requirements. Periodic monitoring determinations are therefore made on a case-by-case basis. To help make this evaluation and to provide for consistency, it is helpful to consider the following factors. A more detailed discussion of this evaluation is contained in the September 15, 1998 memorandum "Periodic Monitoring Guidance for Title V Operating Permits Programs," which is included in Appendix E. The draft Periodic Monitoring Technical Reference Document also provides a process for developing monitoring and examples of adequate periodic monitoring. The draft can be viewed at <http://www.epa.gov/ttn/emc/cam.html>.

Factors Helpful to Consider in Evaluating Periodic Monitoring

Factor	Considerations
The likelihood of violating the applicable requirement (i.e., margin of compliance with the applicable requirement);	Consider how close a unit's emissions are to the emission limits during normal and likely upset operations.
Whether add-on controls are necessary for the unit to meet the emission limit;	If controls are required, consider whether the controls will assure compliance with the emission limit. If so, the best option may be to monitor the control equipment for proper operation instead of or in addition to the process.
The variability of emissions from the unit over time;	Consider how emissions may vary: <ul style="list-style-type: none"> Emissions may vary day to day under normal operation e.g. as a turbine or engine increases or decreases load emissions change. Emissions may vary slowly over time e.g. SCR catalyst may degrade over time. Emissions may vary quickly due to malfunction, e.g. a baghouse bag may break.
The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;	Sources often conduct monitoring and/or maintenance of emission units even if not required under an applicable requirement. Consider whether these activities would assure compliance; if so, they may be the best fit/lowest cost monitoring option for that source.
The technical and economic considerations associated with the range of possible monitoring methods; and	When developing monitoring options, consider what is technically feasible for the emission unit in question. Cost information will help in selection between two or more monitoring options that assure compliance.
The kind of monitoring found on similar emission units	When evaluating whether an example could be applied in another case, it is important to compare the emission limit in the example to the emission limit in the case in question, to determine if the monitoring would be assuring of compliance in the new case. Sources for this information: <ul style="list-style-type: none"> Existing title V and construction permits Federal, State and Local rules CAM Guidelines Document California monitoring recommendations Monitoring guidance developed by States

Guidelines: Periodic Monitoring

If there is no monitoring included in the permit for a particular emission limit, or the monitoring appears to be inadequate,

- Check the Statement of Basis and review the permitting authority's documentation of their periodic monitoring evaluation. The Statement of Basis may show that the source is able to assure compliance with the emission limit without monitoring:
 - An engineering evaluation that shows that the source would not exceed the emission limit under its anticipated range of operations. If this demonstration is made, any assumptions included in the demonstration (for example, type of fuel that will be combusted) must be enforceable permit terms.
- If the monitoring is not adequate to assure compliance, monitoring must be added to the permit. Based on available information, make recommendations to the permitting authority on what monitoring would meet the CAA and part 70 requirements. Because periodic monitoring is a case-by-case determination, you will need to work with the permitting authority to develop the monitoring. See Level I for recommendations on resolving issues during the 45-day review period. Where an issue results in an objection, EPA is required to specify in the objection letter how the permitting authority can resolve the objection issue. In the case of periodic monitoring, there are often various monitoring options that would satisfy the periodic monitoring requirement. This can be addressed in an objection letter by specifying monitoring requirements, or a means of developing monitoring requirements, but acknowledging that other monitoring may be acceptable.

Case Study -- Periodic Monitoring Development

Permitting authorities may opt to create a policy or other guidance document explaining treatment of periodic monitoring for “like” applicable requirements associated with “like” emission units. Region 9 has worked with CARB and California Districts to develop periodic monitoring recommendations for specific emission limits and sources categories. This group developed criteria and a process for developing and evaluating monitoring options. Case-by-case monitoring for specific emission limit/emission unit combinations could be developed following this same process.

The Region 9/California group first developed criteria for evaluating monitoring. These criteria are similar to those listed above, but are more specific to local concerns and considerations:

Periodic Monitoring Criteria

Criterion	Definition
<u>Compliance Assurance</u>	<p>Monitoring that assures compliance is designed to:</p> <ul style="list-style-type: none"> • Monitor key parameters which determine compliance • Be done at a frequency consistent with the likely variability of emissions and margin of compliance • Detect deviations within specific time limits (provide information to operator to correct problems promptly) • Provide information that public could use for direct enforcement.
<u>Margin of Compliance:</u>	<p>Amount of monitoring varies based on how unit is operating with respect to emission limits (x% of emission limit); less monitoring if there is a comfortable margin of compliance.</p> <ul style="list-style-type: none"> • In determining margin of compliance, consider accuracy of emission estimation method -- less monitoring if reliable emission factors exist. Consider <ul style="list-style-type: none"> ▸ Reference method accuracy range e.g. 10% error, and below 90% of limit ▸ AP-42 or other emission factor accuracy e.g. rating and range of emission factor • Consider existence of control equipment
<u>Variability:</u>	<ul style="list-style-type: none"> • Look at emissions over time under normal/upset conditions (within an individual unit) <ul style="list-style-type: none"> ▸ More variability more monitoring; less variability less monitoring ▸ Variability within margin of compliance is acceptable • Also consider variability <ul style="list-style-type: none"> ▸ Within a source category ▸ Caused by equipment failure or degradation, e.g. less ongoing MRR for units without external control devices
<u>Source Size:</u>	<p>Vary monitoring based on unit size as a lb/day or ton/year threshold based on potential uncontrolled emissions, e.g. more monitoring if uncontrolled emissions exceed major source threshold.</p>

Periodic Monitoring Criteria

Criterion	Definition
<u>Burden/Cost to Permittee</u>	<ul style="list-style-type: none"> • Cost of equipment, personnel (training, time spend on job, etc) administrative costs (e.g. time and expense of MRR), cost/ton • Consider the least cost monitoring method that meets other criteria; means of reducing burden/cost include <ul style="list-style-type: none"> ▸ Don't require substantial deviations from current unit operations ▸ Allow data from representative units to be used up-front to determine appropriate monitoring and on an ongoing basis to reduce monitoring costs
<u>Reasonableness (Does it make sense?)</u>	<p>Examples:</p> <ul style="list-style-type: none"> • Burden on agency i.e. inspections, record review: <ul style="list-style-type: none"> Time to <ul style="list-style-type: none"> ▸ Implement condition ▸ Review condition ▸ Review data generated by condition • Technical feasibility of monitoring and test methods e.g. stack testing of fugitive emissions • Existing burden for monitoring
<u>Consistency:</u>	<p>Consistency means monitoring may be different but consistently meets the established criteria.</p> <p>Consistency is important between similar or identical sources e.g. with regard to size, source emission unit category, and emission limits.</p>

The Region 9/California group applied the criteria in order to develop monitoring recommendations for several emission limit/source category combinations. These recommendations are found in Appendix E.

The Region 9/California group also developed a process for applying the criteria. The following process is based on an “DRAFT Process for Establishing Appropriate MRR for Title V Permitting” developed by the Region 9/California workgroup and included in Appendix E. The evaluation focuses on developing monitoring for source categories of like emission limits associated with like emission units, however, this process could easily be adapted to develop monitoring for specific emission limits/emission units on a case-by-case basis.

Example Steps In Monitoring Evaluation

Step	Description	Example
Define Source Categories and Subcategories	In the first phase, the group attempts to clearly define the source category or subcategory to be investigated. If a category contains different emitting processes, the category should be broken up into subcategories.	<p><i>For particulate emissions from material handling operations, for example, five subcategories were initially identified as different emitting processes. These were:</i></p> <ul style="list-style-type: none"> <i>a. Baghouses</i> <i>b. Vent filters</i> <i>c. Fugitive Emissions</i> <i>d. Cyclones</i> <i>e. Scrubbers</i> <p>Other differences that may ultimately warrant different MRR strategies may also be used to separate source categories into rational subcategories. Vent filters, for example, were further divided into two subcategories based on whether their operation was continuous or intermittent.</p>
Preliminary Investigation	The next step toward establishing appropriate monitoring is for members of the group to discuss their understanding of the emissions processes and applicable requirements. The group may identify the need for additional information about the emitting processes or applicable requirements at this point.	

Example Steps In Monitoring Evaluation

Step	Description	Example
Identify Example Sources	<p>It is also helpful to perform analyses in the context of real world examples. District permit files contain information on thousands of actual source operations that may be used as examples.</p> <p>The group should attempt to reach consensus that the examples are indeed representative. If the group cannot agree that the examples are representative, additional alternative examples should be identified.</p>	<p><i>For particulate emissions Material Handling emissions from baghouses, the group focused on one large mineral processing operation in the South Coast AQMD.</i></p> <p>The following information is generally useful for each example:</p> <ol style="list-style-type: none"> a. Facility Name b. Facility Type c. Description of Emitting Operation including information regarding equipment type, equipment size, ratings, fuels, materials, control equipment, etc.. d. Description of the Existing Monitoring e. Compliance Data from source tests, engineering evaluations, etc. f. Emissions data g. Emission Limit h. Margin of Compliance
Identifying Causes of Variation	<p>Whenever possible, the group should identify any causes of excessive variability or noncompliance. Experienced District Staff, CARB Staff, EPA staff, and source operators may be able to help identify causes of variation.</p>	<p><i>For particulate emissions Material Handling emissions from baghouses, for example, failure of filter bags due to holes, tears, etc. was identified as the primary cause of noncompliance with opacity requirements and generic emission limits. This led the group toward considering parametric monitoring schemes that would identify bag leaks.</i></p> <p>Again, it is important that the group achieve consensus on the validity of these determinations.</p>

Example Steps In Monitoring Evaluation

Step	Description	Example
Data Collection	Although looking at one specific example is useful when analyzing monitoring needs, one example generally will not provide enough information regarding variability. This information may be obtained by reviewing source test data, reviewing compliance records, and by talking to experienced compliance or operations people.	<p><i>One way to obtain additional information about emission units is to review standard reference materials. Another is to talk to experienced District Staff, CARB Staff, EPA staff, and source operators.</i></p> <p>By reaching a common understanding of the emitting processes and applicable requirements early, the group can avoid conflicts later.</p> <p>This information may be obtained by reviewing source test data, reviewing compliance records, and by talking to experienced compliance or operations people.</p>
Brainstorm Possible MRR Types	Next, the group should brainstorm potential monitoring proposals. Ideas for monitoring proposals may come from experience, be developed by applying technologies used for similar source categories, or they may be innovative.	<i>For particulate emissions Material Handling emissions from baghouses, emissions calculation, one- time sources test, several parametric monitoring schemes, annual source testing triboelectric monitoring, and continuous opacity monitors were identified as potential candidates.</i>

Example Steps In Monitoring Evaluation

Step	Description	Example
Develop an Options Table for Each Example	<p>The options table should contain one row for each potential monitoring option and the following five columns:</p> <p>a) Monitoring Type – Briefly describe each monitoring option (e.g. one-time sources test, monthly opacity test by EPA method 9, etc.)</p> <p>b) Cost – The estimated annual cost (or one-time cost) of performing the monitoring. Monitoring costs have been obtained from vendors, estimation programs, literature, and knowledgeable staff.</p> <p>c) Reasonableness – For each monitoring option, the technical feasibility and burden to the permitting agency should be addressed under this heading.</p> <p>d) Consistency – The consistency with existing regulations and permitting practices in California and in other regions is evaluated here.</p> <p>e) Compliance – This section is used to address compliance assurance, margin of compliance and variability. One key question to be answered here is: “To what extent will the proposed monitoring method provide data for evaluating compliance on an ongoing basis?” Other relevant information may also be included.</p>	<i>An example options table from the Material Handling Group is included in Appendix E.</i>
Review Options Table	The group should review the options table and openly discuss the relative merits of each option.	

Example Steps In Monitoring Evaluation

Step	Description	Example
Choose MRR Method and Frequency	Choose the most appropriate monitoring method and frequency from the options table. Some of the criteria, such as technical feasibility and data necessary to determine compliance on an ongoing basis, are go/no go criteria. The group cannot choose a monitoring method that is not technologically feasible, or that will not provide necessary data. For other criteria such as cost and consistency, there is not a go/no go threshold. The group must consider the relative merits of each option with respect the criteria. If consensus cannot be reached based on the existing information in the options table, more data/information may be collected.	
Evaluate the Scope to the Determination	The group must decide the scope of the determination (how it extends to other sources in the category). This may be accomplished by placing size or throughput limits on the determination, and identifying any exceptions where the determination may not apply and a different monitoring method or frequency is appropriate.	

The Following Information Appears in Appendix E:

- National Periodic Monitoring Memo
- CAM Questions and Answers
- CAPCOA/CARB/EPA Region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP
- CAPCOA/CARB/EPA Periodic Monitoring Process and Criteria

Other Information:

- See <http://www.epa.gov/ttn/emc/cam.html> for
 - Draft Periodic Monitoring Technical Reference Document
 - Draft CAM Guidance Document

Guidelines:

Schedule of Compliance

September 9, 1999

What is a Schedule of Compliance?

A schedule of compliance details an enforceable sequence of actions that will return a source to compliance. A source is required to have a schedule of compliance in its title V permit if it is not in compliance with one or more applicable requirements at the time of title V permit issuance.

CAA 503(b)(2) requires title V sources to “submit a compliance plan describing how the source will comply with all applicable requirements under this Act...includ[ing] a schedule of compliance, and a schedule under which the permittee will submit progress reports...” CAA 504(a) requires each title V permit to include “...a schedule of compliance...” These requirements are detailed in §§70.5(c)(8) and 70.6(c)(3).

Why Review Schedules of Compliance?

The title V permit must assure compliance with all applicable requirements. Where a source is not in compliance, the schedule of compliance establishes enforceable milestones to bring the source into compliance and requires status reports on at least a semi-annual basis. The schedule of compliance documents that the source has a plan for correcting the problem, and provides means of tracking the source’s progress.

Tips for Permit Review

There are two steps in reviewing schedules of compliance:

- Determine whether the permit contains, or should contain, a schedule of compliance, and, if so,
- Review the schedule of compliance to assure it meets part 70 requirements.

Determine Whether the Permit SHOULD Contain a Schedule of Compliance

When reviewing a title V permit

- Check the permit for schedules of compliance
- Check the application to see if the source certified non-compliance for any applicable requirements
- Check with permitting and enforcement staff to determine if there is any ongoing non-compliance.

If there is potential non-compliance

- Check the permit to see if a schedule of compliance has been included for each applicable requirement for which the source is out of compliance. If not,

Guidelines: Schedules of Compliance

- S** Review the statement of basis for documentation that the source has returned to compliance. If the source is in compliance at time of permit issuance, no schedule of compliance is needed.
- S** If the statement of basis does not provide this information, contact the permitting authority to determine the source's compliance status.
- Based on the above information, determine whether a schedule of compliance must be added to the title V permit.
- Consult with Region 9 enforcement to make sure they are aware of potential non-compliance situations or if the schedule does not appear to bring the source into compliance in a prompt and expeditious manner.

Schedule of Compliance Checklist

If a permit does or should contain a schedule of compliance, the following elements must be included:

- Does the schedule cover each applicable requirement for which the source is not in compliance?
- Does the schedule include remedial measures, including a sequence of actions with milestones leading to compliance with all applicable requirements?
- Are the actions enforceable as a practical matter?
- Is the schedule at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject?
- Does the permit include a schedule for submission of certified progress reports no less frequently than every 6 months?
- Are the progress reports required to contain
 - S** dates for achieving the activities, milestones, or compliance required,
 - S** dates when such activities, milestones, or compliance were achieved, and
 - S** an explanation of why any dates in the schedule were not or will not be met, and any preventive or corrective measures adopted?

Example Schedule of Compliance

The source in the following example failed to conduct an initial source test as required under an applicable NSPS subpart:

1. By [3 months from permit issuance], the permittee shall submit a stack test protocol consistent with EPA Reference Method X to the permitting authority for approval.

Guidelines: Schedules of Compliance

2. By [6 months from permit issuance], the permittee shall conduct a stack test consistent with the protocol approved by the permitting authority as specified by NSPS Subpart [].
3. By [7 months from permit issuance], the permittee shall submit the stack test report to the permitting authority.

Guidelines:

**Alternative Operating Scenarios
and Emissions Trading Provisions**

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III-93

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions


What are Alternative Operating Scenarios and Emissions Trading Provisions?

Alternative Operating Scenarios: The title V permitting program allows the title V permits to contain terms and conditions for “reasonably anticipated” operating scenarios. A source with an approved alternative operating scenario(s) may, as part of normal operations, make changes in operations in a way that triggers a different set of applicable requirements. If a title V permit properly includes these scenarios, the permit will be a more complete representation of the source and will allow the source the operational flexibility without obtaining a permit revision to account for the previously approved operating scenarios and their different applicable requirements.

Emissions Trading Provisions: A title V permit may include provisions that allow permitted sources to establish a federally enforceable emissions cap and would allow emission increases and decreases at the facility to be traded provided the source provides notice 7 days prior to the trade. Trading through SIP approved rules is also allowed and described further in this section.

Why Review Alternative Operating Scenarios and Emissions Trading Provisions?

All Alternative Operating Scenarios and Emission Trading Provisions must be reviewed to see if they meet the core federal requirements. Because these two portions of Part 70 allow a source “operational flexibility” many sources may eagerly approach permitting authorities and EPA to incorporate these “flexible” components to their part 70 permit. However, implementation of these provisions is relatively new. While innovative permitting programs currently explore the boundaries of these provisions (e.g., Project XL, Pharmaceutical MACT, P4 Permitting, etc.) there has been little testing of these requirements in traditional title V permits. So be on the lookout for errors or misinterpretations of the regulations. Remember, when in doubt, consult the regulations.

 CAA 502(b)(6) mandates that permits include, “adequate, streamlined and reasonable procedures” for permit actions. Both provisions are allowed by CAA §502(b)(10) – a requirement that state programs include provisions to allow changes within a permitted facility without requiring a permit revision as long as certain provisions are met. Part 70 permits may contain Alternative Operating Scenarios (See §70.6(a)(9)) and the Emission Trading Provisions. (See §70.6(a)(8) and (10))

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Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

Alternative Operating Scenarios -- The Basics

How Do I Identify an Alternative Operating Scenario?

If the permit contains an alternative operating scenario, it should be clearly identified as such in the source's permit application and permit. Many times, however, routine switches in operation will not be identified as "alternative" even though the source anticipates changes from the normal operational modes (e.g., fuel switches for boilers or IC engines). The Alternative Operating Scenario must clearly describe all operational modes and compliance obligations for each mode. Regardless of the term used, all applicable requirements must be contained in the Part 70 permit and the permit must assure compliance with all requirements.

How Can I Tell if the Alternative Scenario is "Reasonably Anticipated" by the Source?

Does the scenario include only existing emission units and activities at the Part 70 source? If yes, then it is quite possible that the scenario is acceptable. For example, if a Part 70 source has an existing fossil fuel fired boiler and has proposed an alternative scenario to allow the unit to switch between two fuel types, the task of reasonably anticipating the terms and conditions of the two operating modes is fairly easy. The source should rely on its past operational experience and future expectations to identify, in its permit application, all applicable requirements associated with the two operational modes. The permitting authority must, in turn, draft the permit to ensure operation under each mode will be in compliance with all applicable requirements. Refer to the box below for scenarios that may not include equipment that has been identified in the permit.

Watch Out!

...for proposed permit scenarios that would allow:

- the combination and reconfiguration of existing emissions units and control devices in alternative operational states and configurations **that are not identified in the permit**; or
- pre-approval of future like-kind emission units or controls (**not identified in the permit**) that will replace existing equipment (identified on the permit) provided there is not an increase in capacity of the unit(s); or
- new equipment identified in the permit as on-site surplus equipment to replace retired equipment or augment in-service equipment and **may increase production capacity**.

The types of alternative scenarios described here are currently only allowed in **the pharmaceutical MACT standard** at 40 CFR Part 63 Subpart GGG §63.1250 et. seq. (See 63 FR 50280, 50311 and 50318) While this MACT allows preapproval of certain equipment, it also describes details on how compliance with the alternative scenarios will be determined (e.g., detailed record keeping). Be aware of other sources seeking this type of alternative scenario.

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

Table 1 -- How Do I Review the Permit For Alternative Operating Scenario Requirements at §70.6(a)(9)?	
Does the Permit...	What to Look For
...application include the alternative operating scenario that the permit describes?	In order to benefit from the alternative operating scenario, the source is required to describe the alternative scenario in the permit application including the source's processes and products for each alternative scenario. The permitting authority is then in turn required to approve the scenario if they believe that the scenario is reasonably anticipated.
...include emissions limitations and standards, monitoring, record keeping, reporting, compliance and other requirements to assure compliance with all applicable requirements of each such alternative scenario?	Emission limits under each operational mode must be in the permit. Also, the permit must continue to accurately reflect the source's compliance obligations under all requirements applicable to the change. If the permit does not, then a switch to a new operational mode would trigger a permit revision, reopening or a section 70.4(b) notification provision (i.e., 7-day notice prior to modification).
...require the source, contemporaneously with changing operating scenarios, to record each change in a log at the permitted facility?	The contemporaneous record of the present operating scenario that the source maintains on-site serves to document for important inspection and enforcement purposes that the source is in compliance with the source's permit terms and conditions.
...include a permit shield for each operating scenarios?	The permit shield may extend to terms and conditions under each operating scenario. Note: If the permits contemplates a one-time change in operation (i.e., as with advanced new source review) the permit should not allow the source to go back and forth between scenarios. Instead, the permit should identify the requirements that apply before the change and those that apply after the change, and require notice of when the change occurs.

Example of Alternative Operating Scenario: A mining source processes ore at its mine using either a “wet” or “dry” process. Only one process is used at a time and the same PM-10 emissions limit applies regardless of process. Compliance requirements, however, differ depending on whether the source is employing a wet or dry process: the wet process requires particulate matter testing semi-annually; and the dry process requires use of spray bars (with weekly maintenance/monitoring) along with the semi-annual stack test. The source requests, in its title V permit application, that the wet and dry processes be considered as “alternative operating scenarios.” The permitting authority, in turn, incorporates the scenarios in the title V permit, including all necessary monitoring record keeping and reporting requirements of each scenario and includes the requirement that the source maintain a contemporaneous log of each operating scenario.

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

Emissions Trading Program Provisions – The Basics

There are **two types** of emission trading programs allowed under Part 70. Both have been established to meet the operational flexibility requirements of CAA §502(b)(10).

1. The first type is a **mandatory** requirement that state Part 70 programs include emissions trading solely under emissions caps. (See 40 CFR 70.4(b)(12)(iii)) The **permit content** requirements at 70.6(a)(8) and (a)(10) discuss some general trading requirements but do not discuss emission caps specifically. See table 2 for more details on permit requirements for emission caps.
2. The second type of trading program is **optional** and, if incorporated in the state's Part 70 program, would allow a permitted source to trade increases and decreases (assuming the permit does not already provide for such trading) according to a SIP-approved rule that provides for such emissions trades. (See 40 CFR 70.4 (b)(12)(ii)). The 70.6 provisions on permit content are silent about (b)(12)(ii) trades except for the general trading statement under 70.6(a)(8). Instead the compliance obligations reside in the SIP-approved rule, which is now an applicable requirement and therefore, the compliance provisions (or gap-filled periodic monitoring) must be incorporated into the title V permit. The permit must also contain the requirement to notify the EPA and the permitting authority 7 days prior to such change (see 70.4(b)(12)(iii))

The South Coast Air Quality Management District's RECLAIM program is an example of a SIP-approved trading program that allows sources (including title V) to trade increases and decreases according to the SIP-approved program.

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

Table 2 – Permit Content Requirements for Trading Under a Fed. Enf. Cap (70.4(b)(12)(iii))

Does the permit...	What to look for in the application and permit
<p>...include a provision stating that no permit revision is necessary under any approved economic incentives, marketable permits, emissions trading and other similar programs or procedures for changes that are provided for in the permit?</p>	<p>Check the permit and look for this exact language because 70.6(a)(8) requires this statement in the part 70 permit. Even if no emissions trading is expected at the source at the time the permit is issued, this provisions allows for trading that may occur in the future.</p> <p>Note: If the source requests, in its permit application, emissions trading under a cap, proceed to the next row...If you suspect that trading under a SIP-approved rule is expected, review the requirements in table 3 below.</p>
<p>...contain, at the permittee's request, terms and conditions for the trading of increases and decreases within the permitted facility, to the extent that the applicable requirements provide for trading such increases and decreases (e.g., compliance with a federally-enforceable emissions cap) without a case-by-case approval?</p>	<p style="text-align: center;">If Trading Under a Cap:</p> <p>Review the application to ensure:</p> <ul style="list-style-type: none"> • the permittee requested the trading provisions solely for the purpose of complying with a federally enforceable emissions cap; • the cap was established independent of otherwise applicable requirements; and • the source has proposed replicable procedures and permit terms that ensure the trades are quantifiable and enforceable <p>Note: The permitting authority need not include in emissions trading provisions any emissions unit for which there are no replicable procedures to enforce the emissions trades.</p> <p>Review the permit to ensure the permit:</p> <ul style="list-style-type: none"> • contains the trading conditions in the application, if approvable; • requires compliance with all applicable requirements; • includes all monitoring, record keeping, reporting and compliance terms necessary to determine compliance with the emissions trading scheme; and • requires the permittee to provide EPA and the permitting authority with at least 7 days advance written notice [authorizes less for emergencies] of any trade, stating when the change will occur and describing resulting changes in emissions and how they will comply with the terms and conditions of the permit. <p>Note: The permit shield may extend to such terms and conditions.</p>

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

SIP Trading Program in Title V Permits: The following table describes a trading provision that allows, through a **SIP process** with EPA review and approval, an emissions trading program so future trades at a source will not have to undergo case-by-case review. The state and EPA must assure that the SIP or applicable requirement provides replicable procedures to ensure that trades are accountable, enforceable, and quantifiable. If you suspect the permit you are reviewing allows SIP trading at the title V source, you will need to check the permit program, the application, the permit and the statement of basis.

Table 3 – Emissions Trading Based on a SIP-approved Rule (70.4(b)(12)(ii))	
Does the Permit Program or Permit...	Review Tips
...identify the SIP rule under which the source is electing to conduct trading?	SIP approved rule must be identified in the permit.
...contain SIP-approved emission limits?	All emission limits must be contained in the permit.
...already provide for such trading?	If so, then the source cannot take advantage of the §70.4(b)(12)(ii) provision. It is available when the permit does not already provide for such trading.
...require a written notification at least 7 days in advance. Note: the part 70 regulations at 70.4(b)(12)(ii) only require the Part 70 programs to require notifications. It seems reasonable to require the Part 70 permit to also require the notifications along with minimum requirements.	Be sure the written notification includes: <ul style="list-style-type: none"> • when the proposed change will occur, • a description of each change; • a discussion of any change in emissions; • the permit requirements with which the source will comply using the trading provisions of the applicable SIP; and • the pollutants emitted subject to the trade; and • reference to the provisions with which the source in the SIP and that provide for the emissions trade.
Does the SIP Rule include compliance requirements and procedures for such trades including: assurance that any trade is quantifiable, enforceable, accountable and based on replicable procedures?	<ul style="list-style-type: none"> • Quantifiable: Has the state determined the emissions impact of the SIP limit? Are measurement techniques, including test methods, monitoring, record keeping and reporting requirements included for the allowed trading? • Enforceable: emission limits must be enforceable as a practical matter and the SIP must include clear enforcement authority. • Accountable: the demonstration of reasonable further progress, attainment or maintenance for the SIP must account for the aggregate effect on the emissions trades; • Replicable: can two independent entities apply the same procedure and obtain the same result when determining compliance?
Does the permit include a shield for the trades?	The permit shield cannot extend to any change made under (b)(12)(ii). Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade. (<u>See</u> 40 CFR 70.4(b)(12)(ii)(B)).

Guidelines: Alternative Operating Scenarios and Emissions Trading Provisions

Alternative Limits and Trading Provisions –

In addition to trading provisions, the permit may also contain an alternative emissions limit as allowed under the approved program and 70.6(a)(1)(iii). Be aware that sources may elect these alternative limits; there are important distinctions between the two as shown below:

Comparison Between Trading Provisions at 70.6(a)(10) and Alternative Limits at 70.6(a)(1)(iii)

Trading Provisions at 70.6(a)(10)	Alternative Limits at 70.6(a)(1)(iii)
SIP approved program to allow trading at title V sources.	SIP provision must allow for a determination of an alternative emission limit equivalent to that contained in the plan
SIP process must establish replicable procedures to ensure trades are accountable, enforceable and quantifiable.	SIP provisions authorizing alternative limits will not necessarily have established in advance the replicable procedures to ensure that the alternative limits are accountable, enforceable and quantifiable.
Title V permit must assure that the emissions trading provisions contain the appropriate compliance requirements.	Title V permit must contain the replicable procedures as part of full permit issuance. Equivalency demonstration is contained in the permit.

Guidelines:

**Cross Referencing and
Level Of Detail**

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What is Cross-Referencing and Level of Detail?

Cross-referencing refers to the practice of referencing an applicable requirement or supporting document in a permit instead of including the entire text of the requirement in the permit. EPA guidance (White Paper 2) allows permits to incorporate applicable requirements into the permit by citation, instead of including the details of these requirements (e.g., EPA approved test methods). This approach is limited to situations where the applicable requirement is readily accessible to the permittee and the public, and to where there is no ambiguity regarding how the requirement applies to the facility. For example, if a rule provides more than one option of how a source can comply, the citation should be specific enough that it is clear which option (or options) the source will be using. Note: if more than one compliance option is identified, an alternative operating scenario should be used to describe how the permit will assure compliance with each option.

Regardless of the amount of **cross-referencing** in a permit, the permit must always contain **sufficient level of detail** to ensure the compliance obligations of the source are clear. Each permitting authority will have different preferred styles and formats for title V permits and different philosophies as to what makes the permit most effective.

CAA section 504(a) states that each permit "shall include enforceable emissions limitations and standards" and "such other conditions as are necessary to assure compliance with the applicable requirements."

Why Review Permits For Cross-Referencing And Level Of Detail?

All permits must clearly identify how the source will ensure compliance with all applicable requirements stated in the permit. Poor cross-referencing and/or vague details about the compliance obligations will lead to ambiguous compliance requirements and may create a permit that is not enforceable as a practical matter. Permitting authorities must balance the streamlining benefits achieved through cross-referencing with the need to issue comprehensive, unambiguous permits useful to all affected parties.

Permits must specify which emissions limits apply to which emission units.

How Do I Review Permits to Ensure Cross-Referencing is Appropriate and There is Adequate Level of Detail?

Whenever a permit contains a cross-referenced requirement it is important to ensure that:

1. the reference is clear (i.e., unambiguous and contains sufficient detail);
2. the referenced material is available to the public; and
3. emission limits are specified.

Guidelines: Cross Referencing and Level of Detail

The Level of Detail in the permit should be sufficient to clearly explain all applicable requirements and the compliance obligations of the source. Permits that specify only general detail (e.g., “source must comply with 40 CFR Part 60”) or rely on extensive cross-referencing likely will not contain clear compliance obligations.

Tips for Reviewing Title V Permits that Contain Cross-Referencing

Tip	Explanation
After permits specify which emissions limits apply to identified emissions units, cross-referencing may be acceptable for other requirements (e.g., monitoring, recordkeeping, and reporting).	Any information cross referenced, or incorporated by reference should be accompanied by a description or identification of the current activities, requirements, or equipment for which the information is referenced.
Information to be cited or cross-referenced must be current and readily available to the permitting agency and to the public.	Referenced documents must be made available (1) as part of the public docket on the permit action or (2) as information available in publicly accessible files located at the permitting authority, unless they are published or are readily available (e.g., regulations printed in the Code of Federal Regulations or its State equivalent)
Citations and references must be clear and unambiguous and enforceable from a practical standpoint.	Citations, cross references, and incorporations by reference must be detailed enough that the manner in which any referenced material applies to a facility is clear and is not subject to misinterpretation. For example, if there are two compliance options available to the source, the permit must specify which option the source shall use.
Referenced documents must also be specifically identified.	Descriptive information such as the title or number of the document and the date of the document must be included so that there is no ambiguity as to which version of which document is being referenced.

Watch Out:

- ▶ As described in White Paper 2, it is generally not acceptable to use a combination of referencing certain provisions of an applicable requirement while paraphrasing other provisions of that same applicable requirement. Such a practice, particularly if coupled with a permit shield, could create dual requirements and potential confusion.
- ▶ The EPA does not recommend that permitting authorities incorporate into part 70 permits information such as the part 70 permit application (see White Paper 1).

Guidelines: Cross Referencing and Level of Detail

When Reviewing Permits for Cross-Referencing, comment if...

Issue	Example/Explanation	Correction
The permit does not include all emission limits for all emission units (also, the level of detail may not be sufficient).	Example language, “The facility must comply with the emission limits identified in rule 200.”	At a minimum, the permit must contain the full language for each emission limit , including averaging time and other information necessary to understand the limit. Where the SIP-approved and District rule emission limits differ, both emission limits must be given in full unless the source has requested the conditions be streamlined.
If the adoption date of the cited rule is not included	To avoid any confusion as to which version of the rule is cited it is important to include the date of rule adoption	The permit conditions require the company to comply with specific District regulations. If District rules are referenced in the permit instead of being stated word-by-word, the rule adoption date must be included. Referencing the rule adoption date will eliminate ambiguity as the rules change and are renumbered over time.
Permit does not contain sufficient detail to explain compliance obligations	Example permit language “Source must comply with the SO ₂ emission limit in 40 CFR Part 60 Subpart Db.” NSPS allows the source to comply by use of either add-on control or fuel treatment.	When a permit refers to an applicable requirement with multiple compliance options, the permit must detail which of the compliance options will be used.

Guidelines: Cross Referencing and Level of Detail

Tips for Reviewing Permits for Level of Detail

Tip	Explanation
Does permit only identify emission units by generic groups? This approach would allow units subject to specific applicable requirements not to be specifically identified or listed in the permit.	<p>A NESHAP source operates many emission units that are frequently added, removed or changed. The source may also operate similar multiple control devices subject to the same monitoring, recordkeeping, reporting and testing requirements. A contemporaneous on-site log is used to identify specific units and to document changes to and from generic groups.</p> <p>This is a significant policy issue currently under discussion at EPA (See Attachment G – May 20, 1999 letter to STAPPA/ALAPCO). EPA has been exploring this issue through reinvention programs like Project XL, P4 permits, Pharma MACT, etc.</p>
<p>Note: White Paper I allows for the generic grouping of emission units (see pp 9 and 10) provided (1) the class of activities or emissions units subject to the (generic) requirement can be unambiguously defined in a generic manner and where (2) effective enforceability of that requirement does not require a specific listing of subject units or activities. This can apply regardless of the size of the unit.</p>	
Does the permit reference the General Provisions of a specific NESHAP or NSPS standard? Are the standards paraphrased and does the permit also include a citation to the specific requirement?	<p>Permit contains citation to general provisions section and contains a paraphrased statement as to what the compliance obligations are under that section. If the paraphrased statement(s) do not accurately reflect the cited requirements, there could be confusion. To correct the permit the permitting authority should eliminate the paraphrased statement and rely only on the cited section.</p> <p>In general, the more general a reference statement is (e.g., in accordance with 40 CFR Part 60, Subpart O), the less protective of the environment the permit will be.</p>
What level of detail is included in the permit for a specific NESHAP or NSPS Standard?	<p>Here is an example of how the level of detail can vary in a permit...</p> <ol style="list-style-type: none"> 1. The permittee shall conduct compliance and performance testing in accordance with 40 CFR 63.363. 2. The permittee shall conduct an initial performance test on the acid-water scrubber controlling emissions from the sterilizer chamber vents and chamber exhaust vents and on the catalytic oxidizer controlling emissions from the aeration room vent using the procedures listed in 40 CFR 63.7 and in accordance to Table 1 of 40 CFR 63.360 and the procedures listed in 40 CFR 63.363 (b) and © on or before June 4, 1999. <p>Clearly the second example is more detailed and more clearly states the compliance obligations for the source. Each standard will have its own specific requirements that require more or less level of detail.</p> <p>In general, the greater the environmental significance of the requirement the greater the level of detail, e.g., emission limits must have greater level of detail than general provision requirements.</p>

Note: Please refer to the Section entitled: Applicable Requirements: NSPS and NESHAP for a list of questions under discussion at EPA regarding Cross-Referencing and Level of Detail for NESHAP sources. The full discussion on these issues are included in EPA's letter dated May 20, 1999 to STAPPA/ALAPCO (Attachment G).

Guidelines

Origin and Authority Citations

What is a Citation to Origin and Authority?

A citation of origin and authority gives the rule number and section, or permit number, of the underlying applicable requirement for a permit condition. Each permit condition must contain a citation of origin and authority.

40 CFR 70.6(a)(1)(i) states, “The permit shall specify and reference the origin of and authority for each term or condition and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.”

Why Review the Citations to Origin and Authority?

The citation is important because it provides the “**history**” of each condition, which:

- allows the source, inspectors, or permitting agencies to easily locate the underlying requirement for a permit condition to obtain more details on the requirement (which is why EPA recommends including details such as rule section and subsection in the citation)
- tells the permitting agency whether the permit condition can be amended, and if so, what procedures must be followed to amend the underlying applicable requirement before or in parallel with proposing the title V permit. (i.e., a title V permit condition originating from a SIP-approved permit can be changed only by following the appropriate permit amendment procedures to amend the underlying applicable requirement - see page 12 of White Paper #1)

How Do I Review the Citations to Origin and Authority?

When reviewing the citations to origin and authority,

- verify that **all** permit conditions include a reference to the origin and authority
- check to see whether the reference is **correct** (also refer to tips given below)
- refer to the **federal enforceability** section of this guidance for districts where the citation is used to denote whether or not a condition is federally enforceable

Tips for Review of Citations

If the permit condition...	Then the citation...
...is added due to title V requirements, such as additional periodic monitoring or recordkeeping	...should be made to the permitting agency's approved title V rule.
...originates from a SIP-approved permit	...must cite either the SIP Rule under which the permit was issued or the current permit in which this requirement exists. (EPA would prefer if both citations are included.)
...covers multiple applicable requirements that have been streamlined into one permit condition	...should list all streamlined requirements.

When Reviewing Citations, Comment If...

Issue	Example/Explanation	Correction
The permit includes a condition with no citation listed .	Many permits contain periodic monitoring requirements beyond what is specified in the applicable requirement as a means of "gap filling". The permit may cite a SIP rule as the origin of a 10% opacity limit, but may fail to include a citation for the daily visual checks added to the permit as "gap filling" periodic monitoring.	Any "gap filling" periodic monitoring added to a permit should include a citation to the periodic monitoring section of the permitting authority's approved title V rules.

Guidelines:

Insignificant Activities

What Are Insignificant Activities?

Part 70 allows states to establish a list of “insignificant activities.” The items on this list, which is approved by EPA as part of the state’s title V program, generally do not need to be included in a source’s permit application. The purpose of designating insignificant activities is to provide sources some relief in the level of detail necessary in title V applications. If the activity is defined as insignificant based on size or production rate, it must still be listed in the application. Information must also be provided in the application if necessary to determine applicability or fees. **Insignificant activities are in no way exempt from part 70 permit requirements.**

Why Review Insignificant Activities?

There is a common misconception that applicable requirements applying to insignificant activities can be excluded from the title V permit. This misunderstanding is sometimes reflected in permit language that indicates that insignificant activities are not covered by the permit, or are exempt from permit content requirements such as compliance certification. While not generally the focus of review, this problem should be corrected so that the permit will assure compliance with *all* applicable requirements, not just those that apply to certain units.

Insignificant Activities are not discussed in title V of the CAA. Section 70.5(c), “Permit Applications,” states that “The Administrator may approve as part of a State program a list of insignificant activities and emissions levels which need not be included in permit applications...An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to evaluate the fee amount required...” Insignificant activities are also discussed in White Papers 1 and 2.

Tips for Permit Review

When reviewing a title V permit, make sure that

- the permit does not contain language that exempts insignificant activities from applicable requirements.
- permit conditions covering generally applicable SIP requirements and associated monitoring requirements are written broadly so that they apply to these activities.
- any emission caps taken under §70.4(b)(12) do not exclude emissions from insignificant activities.
- requirements such as prompt reporting of deviations, semi-annual reporting, and compliance certifications requirements, are not written in such a way as to exclude these activities.
- if the insignificant activities listed in the permit application are subject to applicable requirements, these requirements are included in the title V permit.

Tips for Permit Review

Issue/Example	Discussion	Correction
<p><u>Exemption from Permit:</u> Some title V permits may include a list of insignificant activities in a way that indicates that these activities are not subject to the title V permit. This sometimes happens when equipment that is “exempt” under a construction permit program is confused with “insignificant activities” under title V.</p> <p>Examples:</p> <p>Lists titled “Exempt Equipment List” or preceded by language such as “The following exempt equipment was identified by the applicant as an insignificant activity.”</p>	<p>While construction permits are not required for “exempt” equipment, title V permits are required to include all applicable requirements, including those that apply to insignificant activities.</p> <p>The full facility permit must cover, in addition to the units specifically covered by existing permits, all activities at the source that are subject to generally applicable requirements.</p>	<p>If, as is often the case, a list of insignificant activities is included in the permit, the language must clearly show that these activities are not exempt from the permit.</p> <p>Note that, while the units must be addressed in the permit, they do not necessarily require the same treatment in the permit as do units subject to unit-specific requirements. Because insignificant activities are usually at most subject to generally applicable requirements, such as opacity or nuisance provisions, the permit can handle the insignificant activities by writing the general permit conditions broadly so that the insignificant activities are captured, so long as the permit is clear that the general applicable requirements apply to all units at the facility, including those not specifically mentioned in the permit.</p> <p>(See White Paper Number 2 in Appendix A for more information on this subject.)</p> <p>Example/Correction:</p> <p>If insignificant activities are listed in the permit, remove any language that refers to the activities as “exempt,” or include language such as:</p> <p>“The equipment listed in this section is subject to all applicable requirements of the SIP.”</p>

Tips for Permit Review

Issue/Example	Discussion	Correction
<u>Exemption of insignificant activity emissions from applicability determinations and emission caps.</u>	<p>All emissions of a particular pollutant, including insignificant activities, count towards determining whether a source is major for that pollutant. Therefore, the permit language should not exclude any emissions from consideration or from the emission cap.</p> <p>In terms of determining major source status and compliance with the emission caps with respect to HAPs, all HAP emissions, including fugitive emissions and insignificant activities, must be counted.</p>	<p>For emission caps that keep the facility from being major for a regulated pollutant, the permit language must be reviewed to assure that there is adequate quantification of emissions for any units not specifically covered by the permit, and that the cap is written to include these emissions. If the permit does not require monthly calculation of emissions from insignificant activities, the emission cap must be set with an adequate buffer so that insignificant emissions which are not explicitly calculated under the permit can be assumed to still be, when added to the rest of the source's emissions, below the major source threshold.</p>

The following information appears in Appendix F:

- Insignificant Activities List
- Q&As on Portable Equipment